



GLOUCESTERSHIRE

**GLOUCESTERSHIRE
COUNTY COUNCIL**

**ANNUAL REPORT
of the County Medical Officer
of Health and Principal
School Medical Officer — 1973**

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TABLES - The vital statistics will be supplied by the Office of Population Censuses and Surveys in May, 1974.

TO THE CHAIRMEN AND MEMBERS OF THE HEALTH AND EDUCATION COMMITTEES

I have pleasure in submitting my Report for 1973 on the Health and School Health Services of the Administrative County. This report is a corporate enterprise with contributions from many members of the department, including Dr. Withnell who had, in fact, made a start before his departure. Dr. Withnell resigned with effect from 13th January, 1974, in order to take up the appointment of Area Medical Officer for the Gloucestershire Area Health Authority, and I know that both members and officers will join with me in wishing Dr. Withnell every success in his new post.

This will be the last Annual Report to the County Council. It therefore seemed appropriate to include a brief historical review of the combined office of County Medical Officer of Health and Principal School Medical Officer, and I am indebted to Dr. Mary Seacome, Principal Medical Officer, for writing this.

Family Planning

For the last twenty years, almost all the family planning clinics in the County have been administered by the Gloucestershire and Bristol Branches of the Family Planning Association on an agency basis. At the beginning of the year, the doctors in charge of the clinics in the Gloucestershire Branch unanimously requested the City and County Councils to assume joint responsibility for the service. The City Council were already administering their own service, and the two authorities agreed to the termination of the agency agreement from 1st April, and the establishment of a joint service. With the exception of medical and social cases, the full cost of contraceptive advice and treatment was paid for by the patient according to a scale of fees laid down by the Family Planning Association. It was expected that from 1st April, the County Council would be permitted to continue to charge for both advice and treatment so that the service would be largely self-supporting financially until a free service was provided by the reorganised National Health Service from April, 1974. Contraceptive advice in the City was already free, and the Secretary of State was not prepared to permit the County Council to make a charge. Although the clinics in the south of the County continued to be administered by the Bristol Branch of the Family Planning Association on an agency basis, it was clearly not right that the ratepayers in one part of the County should have to pay a fee for a service which was free in another part of the County. The Secretary of State's decision necessarily affected the whole of the Administrative County, and a supplementary estimate of nearly £20,000 was required to meet the consequent additional cost of the service. Apart from medical and social cases, a charge for contraceptive treatment continues to be made in both the City and the County. The Family Planning Association is now no longer responsible for the family planning service in North Gloucestershire, but we hope to continue to make use of some of their training facilities. The family planning services generally would not have achieved their present level of excellence or their present degree of acceptability without the expertise and pioneering efforts of the Association. On the transfer of responsibility, the Association were warmly thanked for their work for the County Council.

In the last Report a new scheme was described in which the County Council paid selected general practitioners an annual fee for providing contraceptive treatment for their social cases. So far as is known, this was the first such scheme in the country and a Paper by Dr. Marian Parkinson and Dr. Allan Withnell was published in the British Medical Journal Supplement in April. At the end of 1973 there were 73 general practitioners taking part and a total of approximately 1,800 patients had received treatment under the scheme.

In the last Report brief mention was made of the vasectomy (male sterilisation) service for social cases which was being established in Gloucestershire towards the end of 1972. The service is complimentary to the scheme described above in that in a family where the mother would qualify for free contraceptive treatment, the County Council now pay for the sterilisation of the father where this is the preferred alternative. A patient can be referred only through his general practitioner

both the man and his wife must receive adequate counselling so that both appreciate the irreversible nature of the operation, and both must give their signed consent. The local hospital authorities have given permission for the operation to be performed at the following hospitals: Winchcombe, Totbury, Stroud, Bourton-on-the-Water and Moreton-in-Marsh. It is believed that this service was one of the first to be established by a local authority under the powers granted by the Family Planning (Amendment) Act, 1972, and by the end of 1973, 191 men had received treatment under it.

Ambulance Service

The Mobile Resuscitation Units stationed at Cheltenham General and Frenchay Hospitals, described in the last Report, have continued to operate for most of the year, and are now being evaluated by the consultants and senior ambulance staff concerned. It is already clear that one outstanding effect of the units is to increase greatly the knowledge and experience of the ambulancemen in resuscitation procedures and emergency work generally. The men are seconded to the hospital concerned for periods of one to three months, and work alongside the medical and nursing staff in the wards, accident rooms and intensive care units. The doctors and nurses have been much impressed by the knowledge and ability of the men. So far as I am aware, there is no Ambulance Service in the country which provides a greater depth of training and a more comprehensive range of experience. In conjunction with the City Ambulance Service, training facilities have also been established at Gloucester Royal Hospital under the supervision of Mr. M. Wright, the Accident and Emergency Consultant.

A number of general practitioners are interested in participating in call-out schemes to road traffic accidents and other emergencies, and during the year two meetings have been held in Gloucestershire with doctors and ambulance personnel. It soon became clear that call-out schemes can function efficiently only if the general practitioners had radio telephones in their cars. At Tewkesbury Memorial Hospital there is a small transmitter which is linked by a land line to Cheltenham Ambulance Station. Five of the general practitioners in Tewkesbury have, on their own initiative, provided radio telephones in their cars and have arranged duty rotas for call-out to serious road traffic accidents. When a 999 call is received an ambulance is routinely dispatched, but if the call is received from the Tewkesbury district, it is also possible to call-out a doctor with special training in resuscitation techniques. The decision to call-out the doctor is made by the control operator at Cheltenham and is based on the information received. For example, a head-on collision or information that passengers are trapped would be indications that a doctor with special training was likely to be required. As in the case of the mobile resuscitation units, this call-out scheme will also be evaluated in due course, but it has already brought the doctors and the ambulance personnel closer together with mutual benefit.

It is sad to have to record that, for ten weeks during the year, the Ambulance Service in Gloucestershire was restricted to emergency calls. This action was, however, due to the implementation of Phase 3 of the Government's Pay Code and was not a dispute with the County Council. During the year, a review of drivers' hours was undertaken consequent upon a new interpretation of the Transport Act, 1948, which was given by Treasury Council.

Health Centres

More requests for health centres have been received during 1973 than in any previous year. As a result of applications from general practitioners, the Executive Council has, during the year, formally asked the County Council to build health centres in the following towns and villages:- Bourton-on-the-Water, Charlton Kings, Moreton-in-Marsh, Nailsworth, Chipping Sodbury and Totbury. At the beginning of 1973, there were 11 applications outstanding and, owing to the reduction in Government spending, no new health centre was approved by the Department of Health and

Social Security during the year. One centre (Newent) approved in the previous year, was started in 1973, and another (Stroud) was completed. This means that, at the end of the year under review, there were 17 applications outstanding and all these will go forward as recommendations to the new Health Authorities. Of these 17 proposed centres, 4 are in Avon and 13 in the new Gloucestershire Area, distributed between the two health districts in the ratio of 5 to Cheltenham and 8 to Gloucester.

The chronological order of an application is considered in assessing priorities but other factors, such as the condition of doctors' present premises and the adequacy of other health services in the locality must also be taken into account. The Department of Health will determine the priorities in the coming financial year (1974/75) but thereafter this will be for the Regional and Area Health Authorities to determine. It had been hoped that a start could have been made during the year on the proposed centres at Berkeley, Cinderford and Lydbrook but, because of the reduction in Government spending, loan sanction was not forthcoming. The County Council felt, however, that the projects for Berkeley and Lydbrook were so urgent that building should begin during the present financial year and be financed from the revenue budget. However, the Department of Health and Social Security has not so far given approval under Section 20 of the National Health Service Act for these projects to commence.

Although a temporary embargo was placed on "starts" for the new health centres, the purchase of sites was allowed to continue. In the year under review, a new site was agreed in Cinderford; additional land was purchased in Downend, and in Chipping Sodbury there was an appropriation from the Education Committee. At Berkeley and Tewkesbury the proposed health centres are to be built in the grounds of the local hospitals, and, because of the imminent integration of the hospital and local health authority services, the Regional Hospital Board has agreed to provide the necessary land without cost to the County Council. The site for the centre at Lydbrook had not been purchased by the end of the year, but negotiations were well advanced.

The first health centre was completed in Cheltenham in 1955 and was followed by Thornbury (1968), Yate (1970), Kingswood (1972) and Stroud (1973). The position at the end of 1973 can be summarised as follows: There are five centres completed and one (Newent) is in the process of construction. The plans for a further three (Berkeley, Cinderford and Lydbrook) are at an advanced stage, and sites for a further three (Chipping Sodbury, Downend and Tewkesbury) are available. These facts indicate not only the acceleration of the health centre programme, but the extent to which requests are not being met.

Dental Service

Once again the report on the dental service which was prepared by Mr. J.F.A. Smyth, shows the results of a very efficiently run service. Mr. Smyth has taken the opportunity to review the history of the dental service and it is interesting to follow this development. Here is a good example of a professional service which is being monitored and every attempt made to obtain maximum benefit for the resources allocated to it.

National Health Service Reorganisation

The National Health Service Reorganisation Act received Royal Assent on 5th July, 1973, exactly twenty-five years after the National Health Service came into being. There had been some modifications to the Bill in the House of Lords and in Committee Stage. One of the more important modifications was a decision that the Community Health Councils would be serviced by the Regional Health Authority rather than the Area Health Authority. It was hoped that the effect of this would be to make these bodies more independent of the authorities which they were set up to criticise. After much discussion, it was finally decided that the boundaries of

the new Area Health Authority would be coterminous with those of the new County Council. The only slight modification to this principle is that four hospitals in the Cirencester area will be managed by the Swindon district as a liaison arrangement for a temporary period.

In times of change it is easy to criticise what appear to be minor disadvantages of a reorganised service while neglecting some of the more important and beneficial effects which might result. It will be interesting to read the history of the health service in twenty-five years time in order to judge whether the changes in the management structure which have taken place in this reorganisation have been effective in producing a better service and a fairer allocation of resources.

Acknowledgements

I would like to take this opportunity to pay tribute to the close teamwork which has been a feature of the Gloucestershire County Council Health Department and also to the very great support and help which has been received from other Departments of the County Council. It is perhaps invidious to name one Department more than another but I could hardly fail to pay tribute to the help which has been received from Mr. Milroy, the Chief Education Officer, and Mr. Nichols, the Director of Social Services, and their respective staffs. I would also wish to acknowledge very sincerely the help which the voluntary bodies in this County give in contributing to the work and activities of the Health Department. Finally, I am most appreciative of the support that the Department and particularly myself have received from the County Council and of course, in particular, from the Chairman and Members of the Health and Education Committees.

ROY BARNES,

County Medical Officer of Health
and Principal School Medical Officer

Quayside Wing,
Shire Hall,
Gloucester,
GL1 2HZ.

March, 1974.

STAFF

as at 31st December 1973

County Medical Officer of Health and Principal School Medical Officer	A. Withnell, B.Sc., M.D., F.F.C.M., D.P.H.
Deputy County Medical Officer of Health and Deputy Principal School Medical Officer.	R. Barnes, M.A., M.R.C.S., L.R.C.P., M.F.C.M., D.P.H.
Senior Medical Officer, Information and Research	Mary P.S. Seacome, M.A., B.M., B.Ch., M.F.C.M., D.P.H.
Senior Medical Officer, Child Health	Marion Parkinson, M.B., B.S., M.F.C.M., D.P.H.
Senior Assistant County Medical Officer of Health and Departmental Medical Officer	*M.J. Gryspeerdt, M.B., B.S., D.P.H., M.F.C.M., D.P.M.
Divisional Medical Officers (also District Medical Officers of Health)	R.F. Barclay, M.B., B.S., M.F.C.M., D.P.H. R.E.A.S. Hansen, M.A., M.B., B.Ch., M.F.C.M., D.P.H. A.T. Hunt, M.B., B.S., M.R.C.S., L.R.C.P., M.F.C.M., D.P.H. W.A. Knox, M.B., B.Ch., B.A.O., D.P.H. *R.M. Dykes, M.A., M.D., D.P.H.
Deputy Divisional Medical Officer	
Assistant Medical Officers and Departmental Medical Officers	S.C. Buck, M.A., M.B., B.Chir., M.R.C.S., L.R.C.P., D.P.H. *Beryl A. Davies, B.Sc., M.B., Ch.B. *Margaret Davies, M.B., ChB. Angela Davis, M.B., Ch.B. *Susan Gage, M.B., Ch.B. *Veronica A. Hall, M.B., Ch.B., D.R.C.O.G. S.S. Hart, B.A., M.R.C.S., L.R.C.P. *Ann L. Johnson, M.B., Ch.B. *Gwyneth A. Jones-Davies, M.B., Ch.B. *Coralie A.A. Morrison, M.B., Ch.B. Mary. R. Paine, M.R.C.S., L.R.C.P. *Rosemary M. Robertson, M.B., Ch.B., D.P.H. D.C.H., M.F.C.M. M.H. Ryder, M.R.C.S., L.R.C.P., D.P.H. Dorothy Sell, M.B., B.S. *Catriona F. Smith, M.B., Ch.B. *Christine P. Temme, M.B., B.S., L.R.C.P. M.R.C.S. Hebe F. Welbourn, M.D., D.C.H. *Eleanor M. Wintersgill, Joyce D. Wood, M.B., B.S., D.R.C.O.G., D.C.H., D.P.H., M.F.C.M
Principal Dental Officer	J.F.A. Smyth, L.D.S.
Deputy Principal Dental Officer	J.P.B. Pengelly, L.D.S., D.D.H., D.D.P.H.
Area Dental Officers	D.K. Stables, B.D.S., D.D.P.H. G. N. Willets, L.D.S.

Orthodontists	G.D. Everard, L.D.S. *Mrs. H.C. Peace, B.D.S., L.D.S., D.Ortho. *Mrs. J.M. Popplewell, L.D.S. *Mrs. G.M. Yemm, B.D.S.
Senior Dental Officers	A.C. Bloomfield, L.D.S. Miss P.A. Courthill, B.D.S. D.N. de Gruyther, L.D.S. Mrs. H. Frenkel, B.D.S. Miss S.M. Hunt, B.D.S. R.D. Jeffries, L.D.S. *N. Killingback, B.D.S.
Dental Officers	A.G. Barker, B.D.S. *Mrs. M.E. Bell, L.D.S. *Mrs. S. Cole-Morgan, B.D.S. *W.M. Ellison, B.D.S., L.D.S. *W.M. Evans, B.D.S. Mrs. B.E. Hylton, B.D.S., L.D.S. Mrs. M.E. Jones, B.D.S. Mrs. P.J. Leggott, B.D.S. R.R. Merritt, L.D.S. G.H. Owen, B.D.S. Miss P.E.C. Payne, B.D.S. *Mrs. B. Pitter, B.D.S. R.H. Salt, B.Sc., B.D.S., L.D.S. *Mrs. Y.L.M. Thomas, B.D.S. P.G. Yates, B.D.S.
Dental Auxiliaries	2
Senior Dental Surgery Assistants	4
Dental Surgery Assistants	34 (equivalent to 23.3 full-time)
Dental Health Education Officer	Mrs. U.Y. Miles, A.L.A.M.
Dental Health Assistants	2 part-time
County Dental Laboratory	1 Chief Technician 2 Maxillo-Facial Technicians 1 Senior Technician 1 Technician 1 Apprentice
Director of Nursing Services	Miss. S. Nichols, S.R.N., S.C.M., H.V., Q.N., (N.D.N.), B.T.A., Certs
Divisional Nursing Officer	Miss G.E. Brownhill, S.R.N., S.C.M., H.V., Q.N.,
Area Nursing Officers	Miss E. Hawkins, S.R.N., Q.N., H.V., Mrs. E.M. Meredith, S.R.N., S.C.M., H.V. Mrs. L. Midwinter, S.R.N., S.C.M., H.V. Miss A.R. Radcliffe, S.R.N., S.C.M., H.V., Q.N. Miss J. Twemlow, S.R.N., S.C.M., Q.N., M.T.D.
Health Visitors	81 and 20 part-time
Nurses assisting Health Visitors	21 part-time
District Nurse/Midwives/ Health Visitors	13
District Nurse/Midwives	33 and 7 part-time
Home Nurses	S.R.N.) S.R.N.) 51 full-time and 15 part-time

District Midwives	10
Nursing Auxiliaries	15 part-time
Superintendent Physiotherapist	Miss M. Bailey, M.C.S.P., O.N.C.
Orthopaedic After-Care Sisters and Physiotherapists	12 part-time
County Public Health Officer	R.H. Craig, F.I.P.H.E., M.R.I.P.H.H., M.A.P.H.I.
Assistant County Public Health Officer	L.G. Norman, S.R.N., M.A.P.H.I.
County Ambulance Officer	A.W. Johnson, A.I.A.O.
Deputy County Ambulance Officer	G.P. Turnbull
Health Education Officer	Mrs. R.H. Rice, S.R.N., R.S.C.N., S.C.M., H.V.
Assistant Health Education Officer	Miss A. Gibson
Senior Audiology Technician	A.J. Deacon, M.S.A.T., R.M.A.
Audiology Technician	Mrs. R. Broomhead, M.S.A.T.
Senior Speech Therapist	Mrs. M.D. Heaven, L.C.S.T.
Speech Therapists	4 and 8 part-time
Orthoptist	Mrs. J.R. Gumpert
Chief Chiropodist	D.E. Boden, M.C.H.S., S.R.Ch.
Deputy Chief Chiropodist	J.H. Spencer, M.C.H.S., S.R.Ch.
Senior Chiropodists	10
Part-time Chiropodists	8
Administrative Officer	F.B. Wilton, A.C.I.S.
Deputy Administrative Officer	F.H. Livesey, D.P.A.
Senior Administrative Assistants	M.R. Hayter, D.M.A. J. Yates, D.M.A.

DELEGATED AUTHORITY - BOROUGH OF CHELTENHAM

Medical Officer of Health	T.O.P.D. Lawson, M.D., D.R.C.O.G., D.P.H.
Deputy Medical Officer of Health	K. Matthews, M.B., B.S., D.P.H.
Senior Medical Officer of Health	Brenda G. King, M.B., B.S.
Area Dental Officer	J.B. Clarke, L.D.S.
Dental Officers	Miss M.B. Day, B.D.S., L.D.S. T.H. Jarosz, B.D.S.
Dental Surgery Assistants	5 (equivalent to 3.4 full-time)
Area Nursing Officer	Miss M. Bevan, S.R.N., S.C.M., H.V.
Health Visitors	14 and 1 part-time
Nurses assisting Health Visitors	2
Nursing and Midwifery	
Assistant Superintendent	Miss M.E. Gabriel, S.R.N., S.C.M.
Homes Nurses	19 and 2 part-time
Nursing Auxiliaries	3
Midwives	6 and 2 part-time
Health Centre	2 part-time Nurses
Chiropodists	7 part-time
Speech Therapists	Miss A.M. Fulford Miss R.K. Sneczum
Physiotherapist	Mrs. H. Sarma
Administrative Officer	W.H.G. Meakins

* indicates part-time

SECTION A

STATISTICS AND SOCIAL CONDITIONS OF THE COUNTY

Area (in acres):-

Urban	..	..	..	..	..	..	..	..	..	..	24,246
Rural	..	..	..	..	..	..	..	..	..	..	<u>746,048</u>
											770,294

Population:-

Registrar-General's Estimate (mid-year, 1973):-

Urban	..	..	..	..	..	..	..	..	..	..	187,440
Rural	..	..	..	..	..	..	..	..	..	..	<u>392,540</u>
											579,980

Rateable Value (1st April, 1973)

Sum represented by a penny rate £616,912

Extracts from Vital Statistics will not be supplied by the Office of Population Censuses and Surveys until May, 1974.

When he opened the Stroud Health Centre on 23rd February, 1974, Sir George Godber concluded his remarks by commenting to the Chairman of the County Council, "You have a great deal to be proud of in the heritage which you are passing on to the Area Health Authority." This heritage had its origins in a meeting of the County Council in 1902, when it was decided to appoint a part-time County Medical Officer of Health whose duties were to be the summarisation of the Annual Reports of the District Medical Officers of Health, to confer with those officers as necessary, and to make enquiries for the Medical Officers of Health (Reports) and Sanitary Committee. It is interesting to recall that in April, 1891, at a meeting of the County Council, the Chairman, Sir John Dorrington, had observed, "There is no need for a County Medical Officer of Health unless he is also employed as the Medical Officer of the Sanitary Districts of the County, as the only duties he can perform as County Medical Officer of Health alone, can as efficiently be performed by a Committee of the Council." The passing of the Midwives Act in 1902, which placed many duties on the Authority, probably weighed heavily in favour of the appointment of a County Medical Officer of Health, this position being first held part-time by Dr. J. Middleton-Martin. He relinquished his sanitary district duties in 1912 to become full-time County Medical Officer of Health. There have been four successors; Dr. Kenneth Cowan, 1937-1948; Dr. G.F. Bramley, 1948-1968; Dr. Allan Withnell, 1968-1974; and Dr. R. Barnes who succeeded Dr. Withnell for a short period in 1974 when the latter took up his duties as Area Medical Officer for the new Gloucestershire Area Health Authority.

During the early years the Medical Officer of Health, on behalf of the local authority, was principally concerned with coordination of environmental matters, including water supplies, waste matter disposal, the condition of houses, and with the preparation of statistics on births and deaths; the Midwives Act and the Education Act of 1907 which instituted the School Health Service, widened the scope of the work. Since that time the story of the Health Department has been a saga of expansion of personal health services, with a proliferation of responsibilities and committees. (In 1925 the C.M.O.H. had duties to discharge in connection with the activities of nine County Council committees.)

Certain broad themes are detectable in the development of the service over the years. These include the improvement of services for mothers and children; the support services for the chronically sick and handicapped and the mentally ill; the provision of facilities for the mentally retarded; facilities for the diagnosis and treatment of infectious diseases, particularly venereal disease and tuberculosis; and the prevention of infectious disease by prophylaxis. The actual range of responsibility has been modified during the period by legislation. The principal Acts affecting the work have been as follows:-

- 1902 Midwives Act
- 1907 Education Act
- 1912 Tuberculosis Regulations, which made all cases compulsorily notifiable
- 1913 Mental Deficiency Act
- 1916 Venereal Diseases Regulations, which necessitated setting up a free confidential service
- 1918 Education Act, which extended medical inspection to secondary schools
- 1918 Maternity and Child Welfare Act, which recognised health visiting and gave powers to safeguard the health of mothers and children under five
- 1927 Mental Deficiency Act
- 1929 Local Government Act, which was particularly important as it placed the following duties on the County Council in relation to public health:

- (i) care of the sick, previously under the care of the Board of Guardians, including powers to manage and maintain hospital beds,
- (ii) care of sick and crippled children, care of children without suitable homes, provision of nursing and of milk for children,
- (iii) care of pregnant and parturient and nursing mothers,
- (iv) provision of facilities for vaccination for smallpox (which is still compulsory),
- (v) provision of facilities for isolation of cases of infectious disease,
- (vi) increased responsibilities in connection with water supply, sewage, etc.

- 1930 Mental Treatment Act
- 1936 Midwives Act, which placed on local authorities a duty to provide a full, salaried, domiciliary midwifery service
- 1946 National Health Service Act, under which the public health responsibilities of the local authority were:
- (i) provision, equipment and maintenance of health centres,
 - (ii) arrangements for the care, including dental care, of expectant and nursing mothers and pre-school children,
 - (iii) function as the local supervising authority for the purposes of the Midwives Acts, and the provision of a domiciliary midwifery service,
 - (iv) provision of a health visiting service,
 - (v) provision of a home nursing service,
 - (vi) provision of prophylaxis against infectious disease by immunisation or vaccination where appropriate,
 - (vii) provision of an ambulance service,
 - (viii) arrangements for the prevention of illness and the care or after-care of persons suffering from illness or mental defectiveness,
 - (ix) provision of a home help service.
- 1959 Mental Health Act, which placed emphasis on community care and increased liaison between the hospitals and local health authority workers.
- 1971 Social Services Act, which reduced the range of work of the Health Department by transferring most of its social work content to the newly established Social Services Department
- 1973 National Health Service Reorganisation Act.

The means by which the powers conferred by these Acts were utilised, and the methods adopted to fulfil statutory duties, are revealed in the Annual Reports of the County Medical Officers of Health since 1902. It is impossible here to attempt a complete summary of the contents of these reports, but there are interesting features which are worthy of comment.

Control of infection has been a responsibility shared with the Medical Officers of District Councils. There are three major ways to cope with infectious disease: prevention, effective cure, and control of spread and limitation of severity. It is interesting to note how in the early years, in the absence of effective measures for the first two alternatives, skillful use of nursing and isolation helped to keep highly infectious diseases within reasonable control. Treatment in the form of anti-sera, chemotherapy and antibiotics, produced dramatic reductions in the fatality rates of various diseases, and prophylaxis by vaccination and immunisation cut the incidence to low levels. In many cases vaccines were being used by general practitioners for private patients before being adopted as County policy. There has always been a time gap between the discovery of the feasibility of a vaccine and the production of one which can be recommended for use on a community basis. There is an additional time lag in establishing the acceptability of the vaccine by the public and raising the level of those protected sufficiently to produce herd immunity against the disease. These features are illustrated in Charts 1 and 2.

The first of these shows the number of cases recorded in the County of diphtheria, poliomyelitis and scarlet fever for the period 1902-1972. The decreasing incidence of diphtheria prior to the diphtheria immunisation campaign in 1941 is at least in part attributable to improving methods of isolation, and diagnosis of the disease by bacteriological methods. The slow fall-off and subsequent reduction to no cases at all is directly attributable to diphtheria immunisation. It is interesting to observe that the scarlet fever graph follows a very similar course without any active prophylaxis, and this represents the loss of virulence of an organism. The chart for poliomyelitis, unfortunately incomplete during the war years due to lack of data, shows very clearly the increasing incidence of a disease and its apparent gradual decrease again with a dramatic reduction to no cases a year or two after the implementation of an immunisation programme.

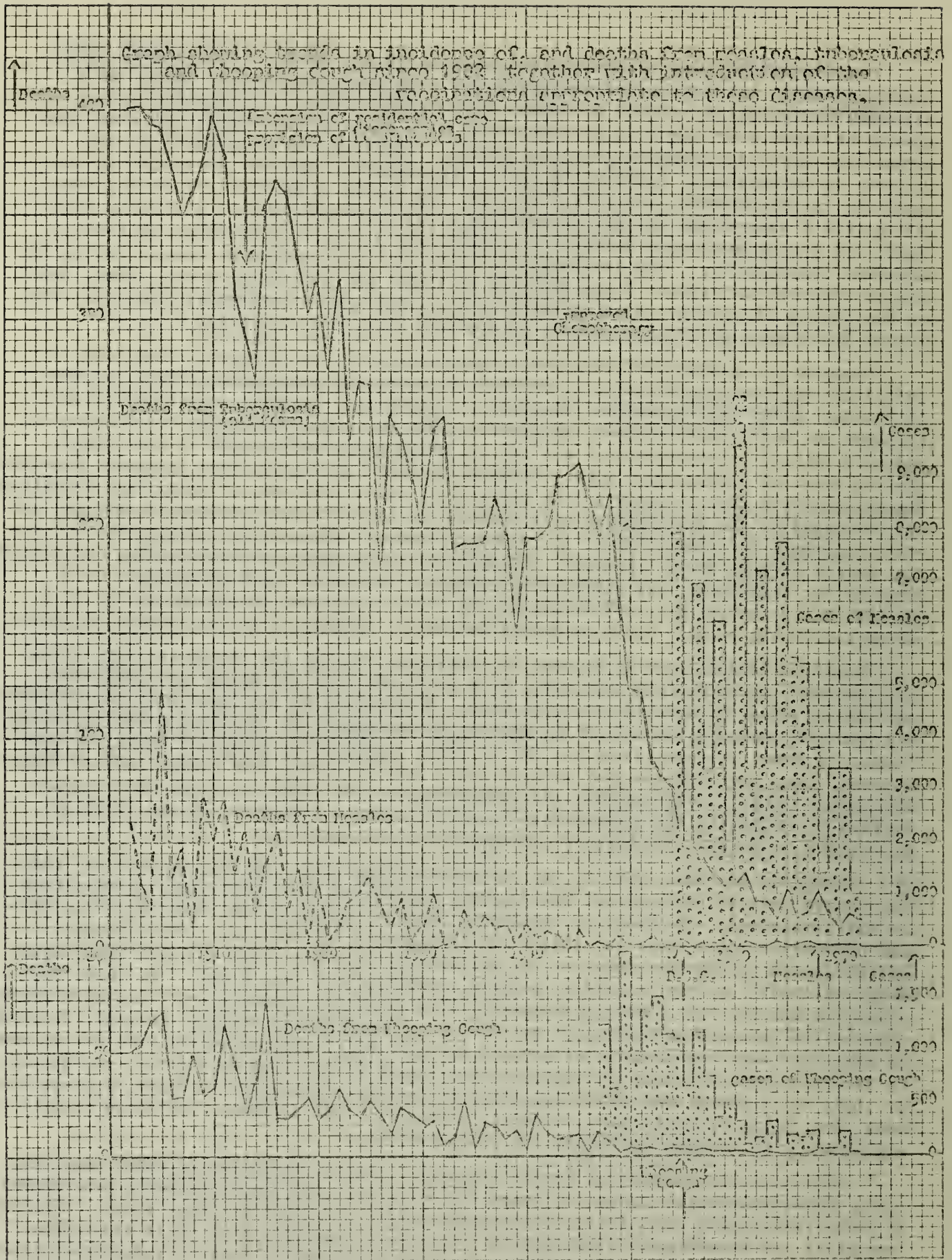
The second chart shows trends in incidence of and deaths from measles and whooping cough, and deaths from tuberculosis over the same period. There is a striking and fairly even fall in deaths from tuberculosis, although the actual number of cases over the same period showed much greater variation. However, the graph does serve to emphasise certain points. The improved management of the disease by extension of residential care, dispensaries, and the provision of home shelters is reflected in the fall from over 350 deaths a year to a level of about 200 deaths a year which was maintained for about eighteen years. Following this there was a vast and rapid decrease in deaths due to the introduction in 1949 of improved chemotherapy. The introduction of B.C.G. vaccination as County policy for school children is without doubt helping to limit the incidence of new cases, and as the deaths of patients from tuberculosis of many years standing diminishes, the actual death rate from tuberculosis should fall to a very low level.

Measles has always been a cause of great concern, the comment being made in 1945 that the "destructiveness of measles is generally practically equal to that of scarlet fever and diphtheria together." Similarly, in 1910, referring to an outbreak in the Forest of Dean, the observation was made, "It would not be easy to select a better illustration of the way in which early child life is sacrificed for the want of pressure of public opinion to exert influence over ignorant parents." The observation that nursing in the absence of other aids was of paramount importance was followed by the institution of a service in 1916 for the nursing of measles and whooping cough by trained staff in patients' homes. This seems to be reflected in the charts of both these diseases. Similarly, whooping cough vaccination has clearly reduced the incidence, and measles vaccination, which was used by doctors on a private basis before the implementation of a County scheme, produced initially a variation in the normal biennial swing and then a reduction in the number of cases.

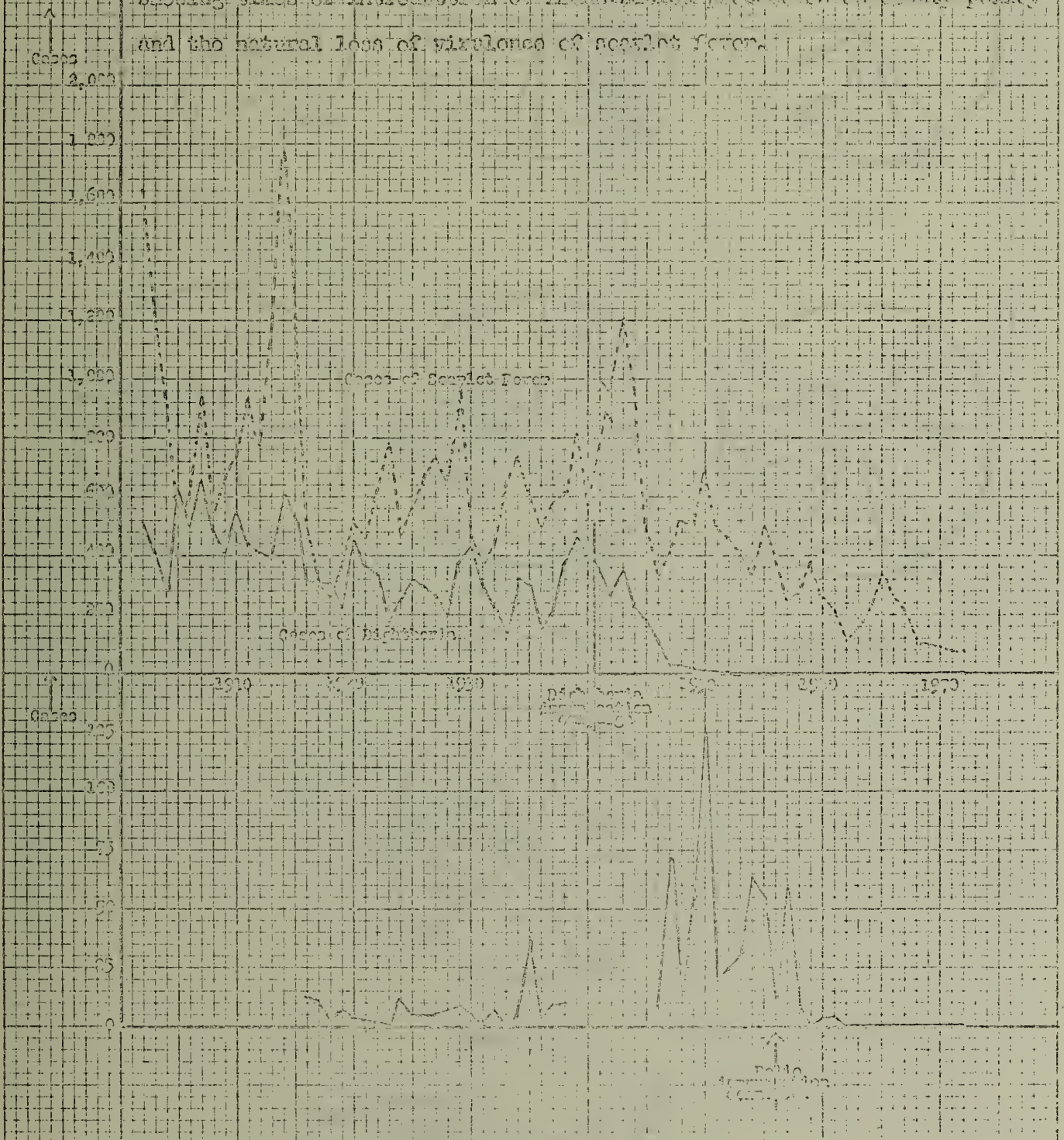
Smallpox caused anxiety during the first quarter of the century, there being two epidemic years in 1923 and 1924, as a spin-off from the major epidemic which was taking place in the City at that time. Commenting on the fact that the disease had not been entirely contained by preventive measures, Dr. Middleton-Martin said, "Improved means of travelling has led to freer movement of infected families; for example, infected families had gone by motor bus to Norton and to Hucclecote (from Gloucester City)". Vaccination was compulsory at that time, but was more easily avoided by obtaining the appropriate certificate from a Justice of the Peace as travelling to public vaccinators presented its own problems.

Reference has been made to the ignorance of parents, and throughout the years successive Medical Officers of Health have emphasised the importance of education in health matters. In 1922, Dr. Middleton-Martin expressed the opinion, "The time has probably arrived when our chief energies should be directed to the general enlightenment of the community as to the nature of preventable disease (including decay of teeth) and as to health matters connected with the home." In 1953, Dr. Bramley remarked, "As a Health Authority it has become necessary to turn more attention to the prevention of cancer and advice on the healthy ways of living. The way is difficult and the methods to be used are not fully discovered, but we are no more in the dark than were our predecessors who began to take action against the fevers of their day without the knowledge now accepted as commonplace." Since his appointment, Dr. Allan Withnell has constantly reiterated the necessity to seize every opportunity to educate the public in health matters.

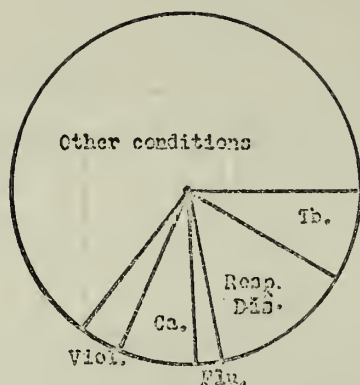
Organised and purposeful health education really commenced in 1929, when the newly appointed Senior Medical Officer for Maternity and Child Welfare, introduced a travelling health exhibition which continued to function for many years. Planned campaigns and teaching on a one to one basis have been the main tools throughout the years. Formerly the teaching was directed principally towards infectious disease and respiratory infections, together with malnutrition, but since the early thirties it has become clear that concentration must be made upon cancers and heart disease which have currently assumed epidemic proportions.



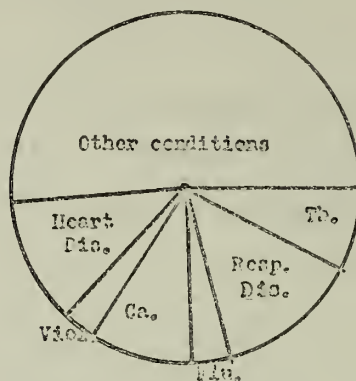
Cases of diphtheria, poliomyelitis and scarlet fever recorded since 1902 showing times of introduction of immunisation procedures on county policy and the natural loss of virulence of scarlet fever.



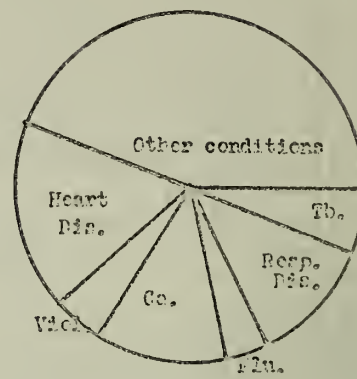
Changing proportions of deaths due to certain selected conditions shown by decades over period 1902 - 1970.



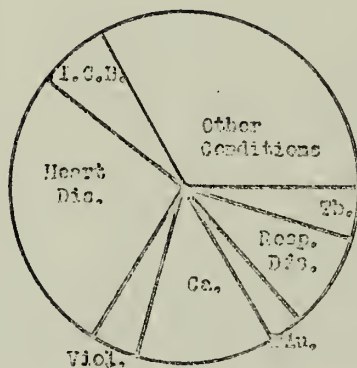
1901 - 1910



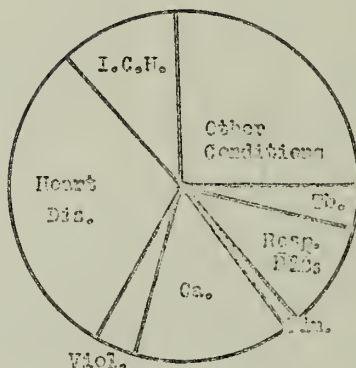
1911 - 1920



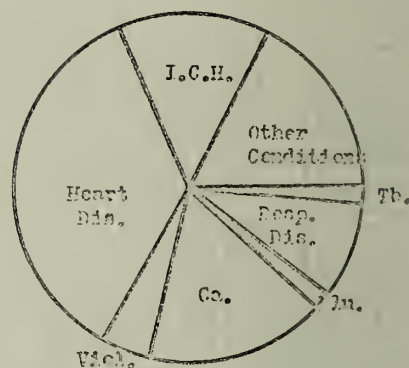
1921 - 1930



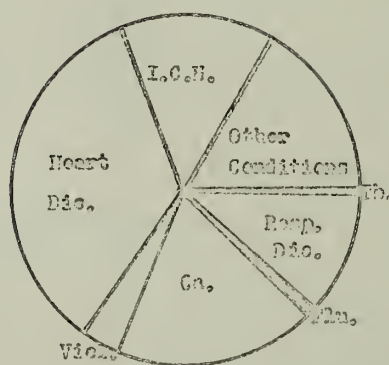
1931 - 1940



1941 - 1950



1951 - 1960



1961 - 1970

Key -

Tb. Tuberculosis
 Resp. Dis. Respiratory Diseases
 Flu. Influenza
 Ca. Cancer of all types
 Viol. Violence including suicides and accidents
 Heart Dis. Heart diseases including coronary thrombosis
 I.C.H. Intracranial hemorrhage

Chart showing increasing proportion of annual deaths due to over 65 years old persons and decreasing proportion due to under 5 years olds during period 1902 - 1973.



Actual deaths in
corresponding
year

4,213

3,900

4,611

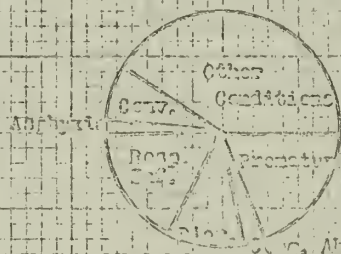
5,485

4,876

5,270

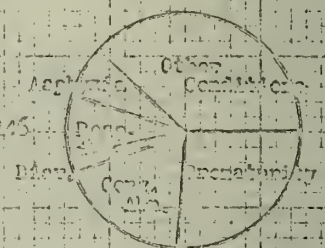
5,930

Percentage
of total deaths
due to
persons over 65



total deaths 665

1970



total deaths 145

1970

The relative proportions of deaths of infants due to prematurity, congenital abnormalities, diarrhoeal conditions, respiratory infections, asphyxia and convulsions (none in 1970) shown as percentages of the total infant deaths for the respective years.

The changing proportions of deaths due to the most commonly occurring conditions over the period 1902 to 1970 are shown by decades in Chart 3. The enormous increase in the proportion of deaths due to heart disease since 1911 when the condition was first recorded in the Annula Reports, is clearly seen. The slower, but none-the-less clearly discernable increase in cancer is also shown. Respiratory diseases show initially a decrease, and then an increase due to the fact that more people are surviving into old age and subsequently dying of pneumonia or bronchitis. It is curious that violence should have remained fairly constant in its contribution to causes of death, and in fact suicide in actual numbers has varied hardly at all during the period.

The proportions of deaths taking place in various age groups also show variations, largely due to the improved control of infections which has already been discussed. Chart 4 shows how the percentage of deaths attributable to those over 65 years has steadily increased during 1902 to 1973, while at the same time the deaths among the under five year olds has decreased. This is a vivid commentary on improved standards of living, diagnostic facilities and medical care. However, there is no cause for complacency as while the expectation of life at birth for males increased by twenty years during the period, the expectation of life at age 45 increased by only four years. This reinforces the belief that health education relating to the killer diseases of the middle years, obesity, coronary thrombosis and cancer of the lung, must receive priority attention.

The high percentage of deaths shown as due to under five years in the early part of the century is largely due to the deaths of infants under one year. The infant mortality rate has been regarded since 1900 as "the most sensitive indicator we possess of social welfare and of sanitary administration"; Chart 5 shows this rate for the County for the period 1902 to 1972, and the proportions of deaths due to prematurity, congenital abnormalities, diarrhoeal conditions, respiratory infections, asphyxia and convulsions in 1910 and 1970. The fall in the infant mortality rate is clearly related to improved obstetric and paediatric techniques, and the quality of community care and advice given to parents. As the actual numbers of deaths have diminished, so the proportion due to the hard core of congenital abnormalities and prematurity have increased. Diarrhoeal conditions and respiratory infections have, without doubt, reduced, not only as a result of better treatment but also as a result of greater knowledge among mothers of hygiene and general care. Deaths due to asphyxia in 1910 were related to "overlying" and other incidence involving ignorance; in 1970 they were related to overwhelming infections and infants being found dead in the cot.

The measures taken in the County to improve the facilities for the mother and her child were extended by the first Senior Medical Officer for Maternity and Child Welfare, Dr. Catherine Morris-Jones, who was appointed in 1929. From then until 1958 she did a great deal to secure better home care, efficient and easily accessible maternity and child welfare centres, and good cooperation with the general practitioners and the hospital service. This function of expanding the facilities available for mothers and children was combined with a continuing study of factors affecting infant mortality, both on a local and national scale, and with the investigation of specific matters relating to child health which gave rise to concern.

In the late 1950s the use of a mobile unit for child health clinics was introduced, following the example of the dental section which was already using caravans for school dental inspections. Using transport to take the service to the people has, perhaps, been a feature of the provisions in this area, commencing with the travelling health exhibition and culminating in the use of the mobile unit for family planning and in cooperating with a voluntary organisation which purchased and maintained a travelling clinic for cervical cytology.

Gloucestershire County Council has been in the forefront of public health provisions not only with its mobile units but in other ways. Perhaps the most notable example lies in the scheme for the extension of medical services designed by Dr. Middleton-Martin and accepted by the County Council in 1919. It is not difficult to discern in the "health-stations" which he first suggested in 1919, the embryo of

the present-day health centre. He envisaged fifty centres around the County, thus ensuring that no person was more than three miles from a centre, at which general medical advice would be available in addition to special services for orthopaedics, tuberculosis, ante-natal care, venereal disease treatment, and the care of school children and ex-service men. The usual medical attendant was to be the local practitioner, with visiting consultants, masseurs and orderlies. It was suggested that a nurse might reside at the station and beds be available in special circumstances. There can be little doubt that this scheme profoundly influenced the findings of the Dawson Committee which recommended the establishment of health centres and pointed to Gloucestershire as an example of an area where developments of this nature were already taking place. One result of this scheme, with its medical advisory committee, together with the policy of employing general practitioners in local authorities' maternity and child welfare clinics, was the early establishment of close working relationships between the three branches of the National Health Service. This cooperation was praised by the Minister of Health in 1933.

The close cooperation referred to above bore fruit during the war years when the hospitals and local authorities united to design an effective hospital service for Gloucestershire. The planning was centred mainly on Cheltenham and Gloucester, a hospital unit being recommended for the area which is roughly equivalent to the present reorganised Gloucestershire County Council. Plans were well on the way, but unfortunately, perhaps, were superseded by the National Health Service Act, 1946, which allocated the responsibility for hospitals and military service to different authorities. It is intriguing to see that Dr. Cowan, in his Annual Report for 1944, commenting on both the hospital scheme and the proposed National Health Service Bill, observes that the total annual cost (of the National Health Service) will be not less than £132,000,000. This figure may well be compared with the present figure of over £2,000,000,000.

In later years the Department has been in the forefront with the introduction of the use of Entonox on ambulances, and in the equipment and maintenance of two mobile resuscitation units. In the family planning field, the scheme for the reimbursement of suitably trained general practitioners for providing contraceptive advice and treatment on social grounds on behalf of the local authority, has been another "first". The Department has also been well ahead in the field in the use of the computer for the maintenance of child health records, the control of "at risk" screening, for audiometry, and immunisation and vaccination procedures.

Details of these services and others which the Health Department is currently providing will appear under the specific headings in this Report. There is no denying that there is substance to Sir George Godber's generous comment, and in no small measure the vitality of the Department is due to the vision of successive Committees to which the Medical Officers of Health have been responsible, and to their willingness to encourage the officers to use their skills to the full.

Report of the Principal Dental Officer

J. F. A. SMYTH

There must inevitably be a note of sadness in writing a Report for 1973, since it is the last whole year in which local authorities will be responsible for organised dental services for children. This is the twenty-fifth Report I have written for Gloucestershire, and the thirtieth about dental services in different authorities. During my thirty-six years in the local authority dental service, I have seen great changes and developments, and attempted to forecast possible developments in subsequent years. With the changeover to an entirely new organisation, it is impossible to forecast, and one can only look back.

A brief history of developments in Gloucestershire gives a striking picture of the changes that have occurred. When the School Medical Inspection service started in 1908, Dr. Middleton Martin records 40% of children's teeth as sound at the medical inspection. In 1912 he notes that in Cambridge, where there was a school dentist, the proportion sound was only 8%, and points out that the medical inspection is necessarily superficial. As early as 1910, Dr. Martin is stressing the need for prevention, and quotes Sir George Newman on the essential part played by diet in pre-school years. It has taken almost 50 years of "progress" (or was it wandering in circles in the wilderness?) to put this wise advice into active practice.

1911 - 1913. Miss Wedgewood provides for dental inspection and treatment at Stanton School. Mr. Norman of Gloucester carries out treatment in her drawing room. Parents pay half the cost, Miss Wedgewood and Mr. Stott making up the remainder. Costs in 1912 for examination, tooth brushes, prizes for good teeth and treatment were £16.18.3, parents paying £4.6.0. In 1913 the Duke of Beaufort and the Managers of Lower Guiting started similar schemes for their schools.

1914 - 1918. The Education Committee agreed to appoint two whole-time school dentists and two nurses, to provide inspection and treatment for children aged 6-8 at a fee of 6d per visit. In June Mr. J. Knowles was appointed, "devised a box to carry a complete outfit in the car", started at Stroud, inspected 1,155 children and treated 149. Records were kept of the state of teeth and gums, grinding capacity, and irregular, hypoplastic, arrested or supernumerary teeth. In 1915, 3,092 children were inspected of the 14,299 on the Registers.

1919. Mr. Knowles left, and Captain Wakely and Captain Wren were appointed. The age groups inspected had been extended to 6-10 years, and in 1920 they inspected 7,903 of the 20,077 children on the Registers. "Gas" sessions were started in various medical "out-stations" and occupied 18 days.

1920 - 1927. Little change occurred in these years. In 1921 the pre-inspection consent system was introduced, which has proved its value over the years. In 1926 the 5-year olds were included, and 16,000 to 18,000 children were inspected annually, treatment being given to 6,000 - 8,000. Dental inspection and treatment, which had occupied a major part of Dr. Middleton Martin's reports, received decreasing mention. The idea of "dental dressers" (senior dental students) was stressed from 1921-1925, following the Dentists Act, 1921. It was 40 years later that dental auxiliaries were in the field! Average costs were given in 1923 as 1s per head for inspection and 3/3 per case for treatment.

1928 - 1937. A third dental officer was appointed in 1928 and a fourth in 1931. First year children in Secondary schools were included in 1929 and pre-school children in 1931. It is curious that each new appointment produced

a major boost of inspection figures, with a boost in treatment figures the following year, but these were not maintained. Between 21,000 and 30,000 children were inspected annually and 11,500 to 17,000 treated.

1938. The first "Senior" dental officer, Mr. Jeffrey Fletcher, was appointed to organise the school dental service.

1939 - 1944. The establishment was raised to 8 dentists, but World War II drained staff and made recruitment extremely difficult. Petrol rationing caused further restrictions on services, and when Mr. Fletcher resigned in 1944 the dental staff was down to three. Nevertheless, the basis for an integrated service, instead of individual dentists working in their own area, had been established. All routine treatment continued to be carried out on school premises with portable equipment, but new equipment was purchased, including dental chairs for some "out-stations". Filton clinic, the first new building after Dr. Middleton Martin's imaginative wooden structures, was completed in 1940. It was the first to have a dental surgery and recovery room purpose-built, but equipment was minimal.

During this period the character of the service changed radically due to a policy of promoting prevention and conservation rather than wholesale extraction. In 1937, for instance, 15,000 teeth were extracted and little more than 6,000 filled. In 1939, a similar number of teeth were extracted, but for 30% more children, and over 12,000 filled. Unfortunately figures for the war years are not available. One-fifth of the time was apparently allocated to mothers and pre-school children, but the only figures recorded are 1,001 attendances for adults and 188 for children in 1939. Since conservation of teeth takes far longer than extraction, the numbers inspected and treated were necessarily less.

1945 - 1948. In this period there was no "Senior" dental officer. Following the provisions of the Education Act, 1944, other authorities were rapidly developing dental schemes. Gloucestershire, with no central dental adviser, made no progress and fell behind most authorities. The dental staff varied from three to four.

1948. With the advent of the National Health Service Act, 1946, I was appointed as "Senior" dental officer, and asked to submit a full report with recommendations to the Health and Education Committees. A joint sub-committee considered the report in detail, and the full Committees accepted as policy a steady expansion of dental staff to 15, and properly equipped dental clinics in each area.

1949 - 1954. The high earnings in National Health Service general practice and low remuneration in the local authority service drained the latter of staff everywhere, and prophets of gloom predicted the end of the school dental service. Redress of the balance occurred gradually, with the setting up of the Dental Whitley Council and cuts in the scale of fees in the general dental service. By the end of the period, Filton clinic had been re-equipped, and dental clinics established at Soundwell, Patchway, Kingswood, Thornbury, Cirencester, Stroud, Gloucester, Cinderford and Coleford. In Cheltenham, the old Borough clinic had been re-equipped and a second surgery added, and a County clinic opened. The first mobile clinic was purchased in 1950, and the first "Gloster", designed by County staff and locally built, was delivered in early 1953. By 1954 there were 4 mobile clinics, and 7 clinics had X-ray machines.

At the end of 1954, the equivalent of 13.3 dental officers were in post, and the first hygienist had been appointed in the previous year. The treatment policy initiated by Mr. Fletcher 16 years previously was continued, and the scope of the service greatly expanded. The hygienist carried out dental health education in schools and welfare centres.

1955 - 1958. In 1955 the County dental laboratory was opened, with 2 technicians. By 1956 there were 4 technicians and an apprentice, and an orthodontist had been appointed. From the outset the laboratory carried out all the work for the hospital dental staff in the North Gloucestershire clinical area, thus anticipating integration by 19 years.

Clinics were opened at Chipping Sodbury, Wotton, Tewkesbury and Moreton-in-Marsh, and at Lydney the first solely dental clinic was built. Two more mobiles were purchased, but the original one had to be scrapped. By 1958, the staff, which had reached a peak of 15.4 in 1955, was down to 13.6. A link with the past was lost with the retirement in 1955 of Mr. Wren, who had been appointed in 1919.

1959 - 1961. In 1959 the County made history by appointing a dental health education officer, the first in the country. The appointment, in fact, preceded that of health education officer by several years. Thus dental health education was put on an organised and co-ordinated footing, and in 1961 the County was asked by the Ministry of Health to be one of four authorities conducting a three-year pilot scheme to test the value of dental health education. Two area dental officers were appointed, for Cheltenham Borough and mid and south Gloucestershire. Dental clinics in purpose-built premises were completed at Dursley, Cirencester and Downend. The period finished with 18.6 dental officers in post, and a steady increase in the numbers inspected and treated.

1962 - 1964. These were years of real progress, and continued progress seemed in sight. In 1962 the first dental auxiliary was appointed, and 4 were in post by the end of the period. Dental officers had increased to the equivalent of 22.5, and as a result 81% of the school population was inspected - a percentage never achieved subsequently, although more children were inspected in later years.

The value of caries prevalence figures was established, the first apprentice trained in the laboratory passed his Final examinations, and the pilot scheme had ended with an embarrassingly well supported competition in schools (over 1,000 entries had to be judged). The County had 26 surgeries in fixed clinics, and 11 mobiles. The only cloud appeared to be the rejection by the County Council of fluoridation in 1963.

1965 - 1967. The euphoria of 1964 was followed by a period of increasing gloom. Staff left and could not be replaced, the County Council again rejected fluoridation and the number of school children inspected decreased, although the number treated increased. On the brighter side, a joint scheme of dentists and pharmacists arranged a successful display fortnight in shop windows, the provision of new clinics went ahead with Tetbury, Winchcombe, Cheltenham (County Offices) and Bourton being completed as well as 3 new mobiles, and a Deputy Principal Dental Officer was appointed.

1968 - 1972. The first combined school and maternity and child welfare report appeared in 1968. Staff increased to a maximum of 25.3 dental officers in 1971, and in 1968 there were a maximum of 8 dental auxiliaries. The latter sadly declined in number to the equivalent of 3.7 in 1972, but dental health education continued to expand steadily, following detailed work on defining priorities in 1969. The caries prevalence figures strongly indicated that this work had been effective, since the 5-year old children free of any decay were steadily increasing while the number with really bad teeth steadily decreased. The improved condition of the 14-year old children indicated the success of dental health education in schools, and the co-operation of heads in not selling sweet "tuck" in school.

A peak of 2,179 pre-school children inspected occurred in 1971, and a peak in school children in 1972, with 79,966 inspected. This was however only 74% of the school population. The number of children treated showed only small

fluctuations. Reorganisation of Local Government, the two Green Papers on Reorganisation of the Health Services and similar events increasingly cast a shadow of uncertainty about the future of the County dental services, into which so much thought and effort had been put since 1910. It was inevitable that there should be speculation about how much would be lost which had been so slowly and painfully gained.

Many interesting and encouraging events are recorded in these recent Annual Reports, but the Health Committee's resolution in favour of fluoridation was again rejected by the County Council in 1970, and in 1969 the link with pre-war days was lost when Miss Stephens, the senior dental surgery assistant, retired. She had been with the service since Mr. Fletcher was appointed in 1938.

Some lessons of history

A study of the history of the development of the County dental services shows a familiar growth pattern of spurts, static periods and recessions. At the time of writing of each report, the spurts seemed to presage more growth, and the recessions to be forerunners of doom. Some of the lost opportunities were inevitable, caused by external events like wars, but others were avoidable, such as the lack of a "Senior" dental officer from 1944 to 1948, which resulted in Gloucestershire being very much behind the rest of the country in the immediate post-war period. The same pattern has continued since 1948, and trends in staffing and percentage of school population inspected for the last 10 years can be seen in Figs 1 and 4.

The scope of the service has inevitably changed over the last 60 years. Conservation has steadily increased with a corresponding decrease in extractions. Time-consuming work such as orthodontics and the provision of crowns and similar restorations has necessarily meant more time spent on each patient and therefore fewer treated in a year by each dentist. Consequently there is always a demand for more staff, more money. It is pertinent to consider how cost/effective these changes can be shown to be. I do not know of any viable criteria, but we should be attempting to identify them.

The table below gives a very rough outline of the main types of work carried out for school children over 59 years. Figures for 1914 - 1918 give no details of work carried out, and those from 1944 - 1948 are somewhat suspect, owing to the system used in that period.

Table I. Average Staff and Outline of Work per Dental Officer per Year

<u>Period</u>	<u>Dentists</u>	<u>Inspected</u>	<u>Treated</u>	<u>Fillings</u>	<u>Extractions</u>
1914-1918	1	3,180	1,090	-	-
1919-1927	2	7,353	3,382	1,016	5,339
1928-1930	3	7,870	4,179	1,868	5,395
1931-1937	4	6,206	3,561	1,933	3,955
1938-1940	5	4,384	2,577	1,966	3,327
1944-1948	4.5	4,828	2,709	2,440	2,878
1949-1954	7.6	2,748	1,490	1,966	1,607
1955-1958	14.5	2,338	980	1,848	1,410
1959-1968	19.4	2,728	1,056	2,440	876
1969-1972	26.4	2,764	928	2,560	592

A superficial look at the table suggests that appointing dentists in excess of three (1928-1930) results in a diminishing number of children for whom each provides dental care. Reference to the last two columns, however, shows the steady increase in fillings (37% more in 1969-1972 than in 1928-1930) and the dramatic decrease in extractions (590 in the latter period compared with 5,400 in the former). In general, the extra fillings represent the more complex and time-consuming type of work for teeth which would have been removed 40 years earlier. It is certain that a great deal more time is spent on each child at the present time, including, if necessary, orthodontic treatment which requires by far the greatest expenditure of time.

There is a tendency for this trend to continue, and I believe that serious thought must be given to methods of evaluating the cost/effectiveness of the dental care of children and their developing dentition. For example, a great deal of time can be spent on conserving the deciduous dentition. Can this time be shown to be effectively spent in terms of the result in the mature dentition of the young adolescent and adult? Dental manpower and the percentage of the G.N.P. devoted to dental care will never be unlimited. Therefore it is essential that available resources be used as effectively as possible, particularly in an organised salaried service. This central aspect of dental management requires combined long-term research by the Department of Health and Social Security, the Universities and dental staff in the Area Health Authorities. Will it be one of the benefits of integration?

Changes in 1973

All figures for 1973 show little difference from 1972. Again, there were changes in dental officers which, although inevitable with a fairly high proportion of younger age groups, does have a disrupting effect, particularly on young patients. One of our three very experienced dental auxiliaries left when her husband was moved, but she is now dental health education officer to the Inner London Education Authority. The enthusiasm and expertise of a keen and experienced auxiliary are great assets both for treatment and dental health education, and suitable replacements have not been found.

The year ended with the same number of dental officers in post as on 31. 12. 72 (whole-time equivalent 28.6), but 566 more clinical sessions were worked in the year. It is disappointing, and indeed disquieting, to record little increase in identifiable work carried out. How far this is due to staff changes and the uncertainties of the future cannot be determined, but these are certainly factors.

Mr. Stables, area dental officer for South Gloucestershire, increasingly shouldered responsibility for arrangements in the part of the County which will become a part of Avon, so as to minimise difficulties of transferred staff. Extracts from his report appear later.

Figure 1 shows the changing trends of manpower in relation to the school population, from one dental officer or auxiliary to 3,300 children in 1969 to one to 3,800 in 1973.

Fig.1. Manpower - School Children per Dental Officer (Auxiliaries added)

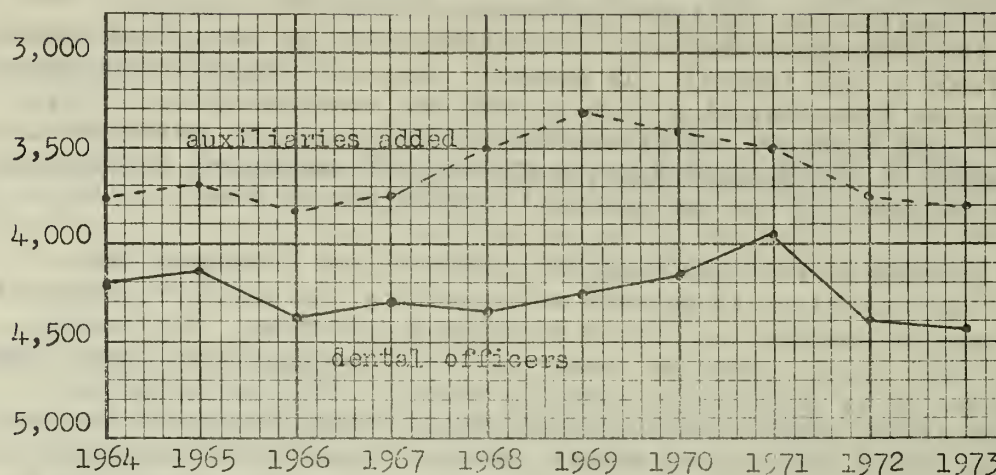


Table A - Allocation of Sessions

	Dental Officers				Dental Auxiliaries			
	1973		1972		1973		1972	
	No.	% of total	No.	% of total	No.	% of total	No.	% of total
School Inspections	881	7.6	824	7.6	-	-	-	-
Treatment in Fixed Clinics (School)	5,753	49.9	5,489	50.7	472	32.0	655	39.7
Treatment in Mobile Clinics (School)	3,188	27.6	2,754	25.4	594	40.3	530	32.2
Orthodontics	1,197	10.4	1,243	11.5	-	-	-	-
M. and C. H.	485	4.2	484	4.4	84	5.7	91	5.5
Administration of General Anaesthetics	33	0.3	41	0.4	-	-	-	-
Dental Health Education (School)	-	-	-	-	96	6.6	152	9.2
Dental Health Education (M. and C.H.)	-	-	-	-	229	15.4	220	13.4
Total	11,537	100.0	10,835	100.0	1,475	100.0	1,648	100.0

Premises

The new premises at Kingswood Health Centre proved attractive to both staff and patients. Completion of the dental suite in Stroud Health Centre was delayed, and the transfer from 9, John Street, did not become effective till January, 1974. Work was started at Newent Health Centre, where it is hoped that one of the surgeries will be used by a general dental practitioner. Only the most urgent needs for re-equipment were able to be met owing to financial stringency.

Prevention

The two-year scheme for supplying tablets of sodium fluoride to mothers of children aged 1-4 years at Cinderford and Yate was terminated owing to the low perseverance rate. Full details of the scheme and the results will be published in 1974. The mouth rinsing scheme at two schools in the Tewkesbury area ran into increasing difficulties, and will have to be terminated early in 1974. Experience gained of the practicability of various means of prevention may be summarised as follows:-

1. Fluoride tablets. Only the smallest minority of parents are so highly dentally motivated as to persevere for any period over six months to administer daily dosage of tablets to their children.

2. Fluoride mouth rinsing in schools presents many practical difficulties. Studies elsewhere indicate that it is effective (although less effective than in Scandinavia where the pattern of caries is different), but needs considerable perseverance and co-operation from schools. It does not cover the important pre-school years.

3. Topical application of fluoride is effective for children who are prone to severe caries, but requires considerable dental time and has a low cost/effectiveness as a generalised measure.

4. Fluoridation of water supplies remains as by far the most effective and cheapest method of providing the preventive effects of fluoride. It remains to be seen whether the many changes in policy-making and its implementation resulting from Area Health and Regional Water Authorities will hasten the wider adoption of this public health measure.

5. Dental health education by all concerned in the attitudes to dental health of the growing family has been shown to be effective provided that there is a simple, centrally co-ordinated, long-term policy.

The County dental health education continued despite the disruptions and difficulties briefly mentioned by Mrs. Miles, who, despite the demands of a full-time hygienist course, gave her utmost support at week-ends. Nevertheless the service was under severe strains, and that it continued in strength reflects great credit on all concerned. The results of preventive work over 10 years are shown in the improvement in the teeth of children aged 5 and 14 years, which is illustrated by the graphs in Figs. 2 and 3 of Mr. Pengelly's section.

Dental Health Education (Mrs. U. Y. Miles)

Although this was a year full of changes and difficulties, the output of talks compared favourably with previous years. There was a slight increase in the number of mothercraft centres visited, more talks were possible at child health clinics, and additional play group classes were talked to. Thus our policy of the mothers and young children being our first priorities for dental health was satisfactorily adhered to. On top of this, a considerable number of schools were visited as well as various other organisations throughout the County, and several exhibitions and displays were held, so providing a very varied programme of activities. Without doubt it was the enthusiasm of each member of the dental health team that made this possible. In these depressing times it is most encouraging that interest of this magnitude exists, and such keenness, projected into dental health education, is essential for success.

For the latter five months I viewed dental health activities from afar, having been given leave of absence to undertake a dental hygienist course at Birmingham Dental Hospital. This will provide understanding and important guidance to the team of the rapidly changing and exciting field of periodontology, and without doubt great benefit will be obtained. I am most grateful to have been given this opportunity.

As always, on behalf of the team members, I offer our grateful thanks to all who have helped in the promotion of dental health in Gloucestershire. With the new authorities being created, the team will be split. It is to be hoped that Avon will continue to benefit from the established service now operating in the "Gloucestershire" part of that area, despite the loss of one of our two invaluable dental auxiliaries there. In the new Gloucestershire, this important part of the dental service must continue, if possible with even more vigour. Over the years many new ideas have been pioneered in this County and subsequently adopted by other authorities. It is something of which we should be proud, and which we should not forget in the transitional period, so that dental health education will emerge as an established, essential and worthwhile service to the community.

Table B - Dental Health Education

Sessions:

Auxiliaries	=	325
Dental Surgery Assistants	=	132
Dental Health Assistants	=	129
Dental Health Education Officer	=	1 full time

Activities:

	No. Visited		No. of Visits or Talks	
	1973	1972	1973	1972
Mothercraft	35	31	168	170
Play Groups	78	105	131	117
Child Health Clinics	132	98	193	148
Schools - Primary	167	135	725	669
Secondary	11	8	31	14
Other Audiences	31	45	31	45
Total	454	422	1,279	1,163

Fluoride Mouth-rinsing = 38 sessions

11 Displays and 3 Exhibitions held

Prevalence of Decay (Mr. J. P. B. Pengelly)

A simplified method of recording caries prevalence commenced in 1963 for all children aged 5, 8 and 14 seen at school inspections. For 5-year old children the numbers free from decay and with 10 or more decayed, extracted or filled teeth in the deciduous dentition are recorded. For children aged 8, the numbers of children who are free from decay or with 8 or more deciduous molars decayed, extracted or filled are recorded. For children aged 14, the numbers with one or more decayed, extracted or filled incisors are recorded.

Amongst other purposes, the results of these investigations are used to plan the dental health preventive programme and to measure its effectiveness. Differences have been noted in caries prevalence in children from urban and rural communities and within these communities.

The percentage of 5-year old children free from decay is the second highest recorded, falling just below the peak of last year. It is of even greater importance that the percentage with 10 or more carious teeth (dental cripples) continues to decrease. This may well be the result of the past concentration of dental health education on the mothers of young children.

The 8-year old children have been subject to the influences of school for three years since they were examined at 5 years old. Although there is an improvement in the percentage free from decay, there is an increase in the percentage with 8 or more carious molars when compared with the 1972 figures. There were, however, more dental cripples in this group than in the preceding year when they entered school at 5 years old.

The improvement in the 14-year old children reported last year has been maintained and is the lowest percentage recorded of decayed, extracted or filled incisors since the investigation started.

Table C gives the full figures for 1973, and figure 2 shows the trends over a ten year period for the 5-year old children free of decay and with severe decay. Figure 3 shows the trend of 14-year old children who have had decay in one or more of their front teeth.

Fig. 2. Five year old children caries free and with 10 or more d.e.f. teeth.

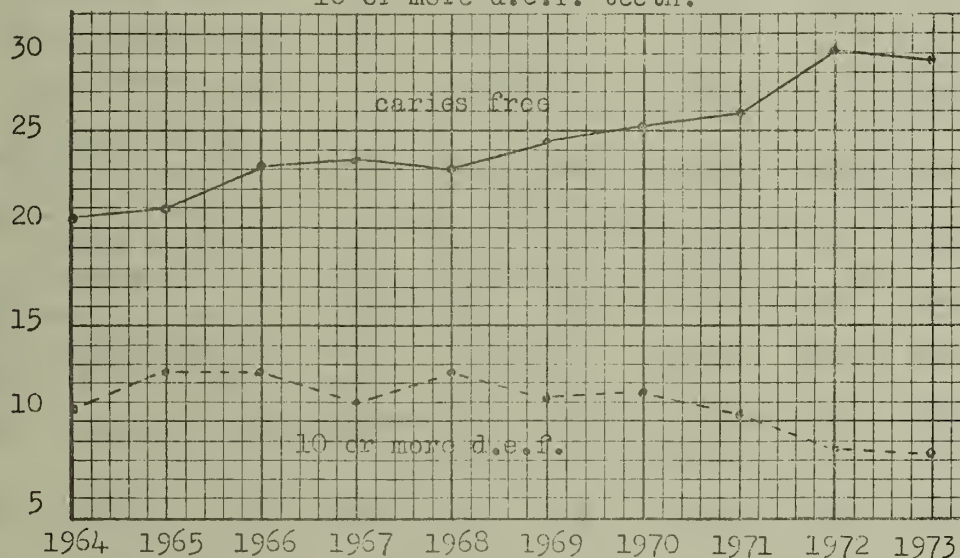


Fig. 3. Fourteen year old children with one or more D.M.F. incisors

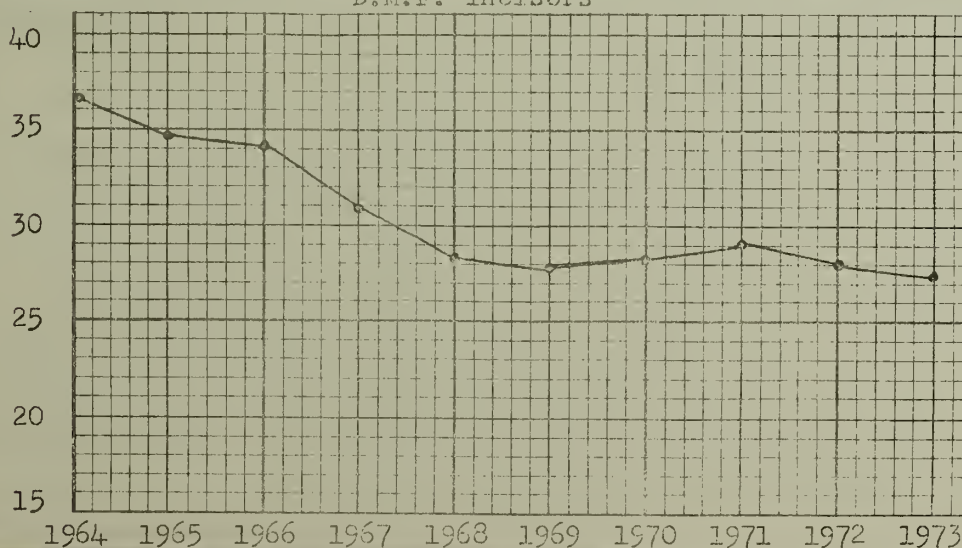


Table C

Caries Prevalence in Gloucestershire (1973)

DISTRICT	5 YEAR OLD CHILDREN					6 YEAR OLD CHILDREN				
	Number inspected	Number with no d.e.f. teeth	Percentage with no d.e.f. teeth	Number with 10 or more d.e.f. teeth	Percentage with 10 or more d.e.f. teeth	Number inspected	Number with no d.e.f. molars	Percentage with no d.e.f. molars	Number with 8 d.e.f. molars	Percentage with 8 d.e.f. molars
CHELTENHAM BOROUGH	451	145	32.2	32	7.1	634	77	12.2	157	24.7
CHELTENHAM SUBURBS	359	110	30.6	27	7.5	396	74	18.7	110	27.8
GLOUCESTER SUBURBS	111	26	23.4	13	11.7	249	20	8.0	80	32.1
BRISTOL SUBURBS	1235	393	31.8	80	6.5	1619	152	9.4	507	31.3
STROUD AND DISTRICT	634	147	23.2	67	10.6	785	60	7.6	263	33.5
URBAN AREA TOTAL	2790	821	29.4	219	7.8	3683	333	10.4	1117	30.3
FOREST OF DEAN	407	70	17.2	60	14.7	504	17	3.4	184	36.5
NORTH SEVERN VALE	214	61	28.5	27	12.6	216	16	7.4	97	44.9
SOUTH SEVERN VALE	893	307	34.4	44	4.9	664	75	11.3	194	29.2
NORTH COTSWOLD	133	49	36.8	12	9.0	131	14	10.7	48	36.6
SOUTH COTSWOLD	308	89	28.9	17	5.5	327	31	9.5	103	31.5
SMALL TOWNS AREA TOTAL	1955	576	29.5	160	8.2	1842	153	8.4	626	34.0
FOREST OF DEAN	288	66	22.9	26	9.0	342	24	7.0	163	47.7
NORTH SEVERN VALE	250	64	25.6	22	8.8	279	38	13.6	113	40.5
SOUTH SEVERN VALE	403	109	27.0	33	8.2	433	48	11.1	127	29.3
NORTH COTSWOLD	154	40	26.0	15	9.7	175	18	10.3	55	31.4
SOUTH COTSWOLD	253	87	34.4	17	6.7	273	31	11.4	85	31.1
VILLAGES AREA TOTAL	1348	366	27.0	113	8.4	1502	159	10.6	543	36.2
GRAND TOTAL	6093	1763	28.9	492	8.1	7027	695	9.9	2286	32.5

Table C (cont'd)

Caries Prevalence in Gloucestershire (1973)

DISTRICT	14 YEAR OLD CHILDREN		
	Number inspected	Number with 1 or more D.M.F. incisors	Percentage with 1 or more D.M.F. incisors
CHELTENHAM BOROUGH	213	58	27.2
CHELTENHAM SUBURBS	348	90	25.9
GLOUCESTER SUBURBS	453	156	34.4
BRISTOL SUBURBS	1187	246	21.0
STROUD AND DISTRICT	314	93	29.6
URBAN AREA TOTAL	2515	643	25.6
FOREST OF DEAN	829	282	34.0
NORTH SEVERN VALE	160	55	34.4
SOUTH SEVERN VALE	694	190	27.1
NORTH COTSWOLD	37	13	35.0
SOUTH COTSWOLD	330	77	23.3
SMALL TOWNS AREA TOTAL	2050	617	30.1
GRAND TOTAL	4565	1260	27.6

Inspections

Slightly more pre-school children were inspected than in 1972, of whom 50% needed treatment. Fewer school children were inspected (just over 70% of the school population) as shown in Figure 4. Table E indicates a slight but steady decrease in the number of children accepting treatment with the school service and an increase in those who appear to be regular attenders of general practitioners. What is disquieting is the increase in the numbers not receiving regular attention. The percentage had been steadily falling over the past ten years, but an increase of over 5% in 1973, unless it is a very temporary trend, gives cause for concern. Yet unless the effectiveness of the staff can be increased, there is little prospect of providing regular treatment for the hard-core of "refusals".

Table D Mothers Inspected

	Inspected		Requiring treatment	
	1973	1972	1973	1972
Mothers			145	155
Pre-school		1,083	1,051	1,083
School - Routine (1st)	69,661	71,661	53,648	47,765
School - Special (1st)	7,325	7,325	6,047	5,767

Fig. 4 - Percentage of School Population Inspected

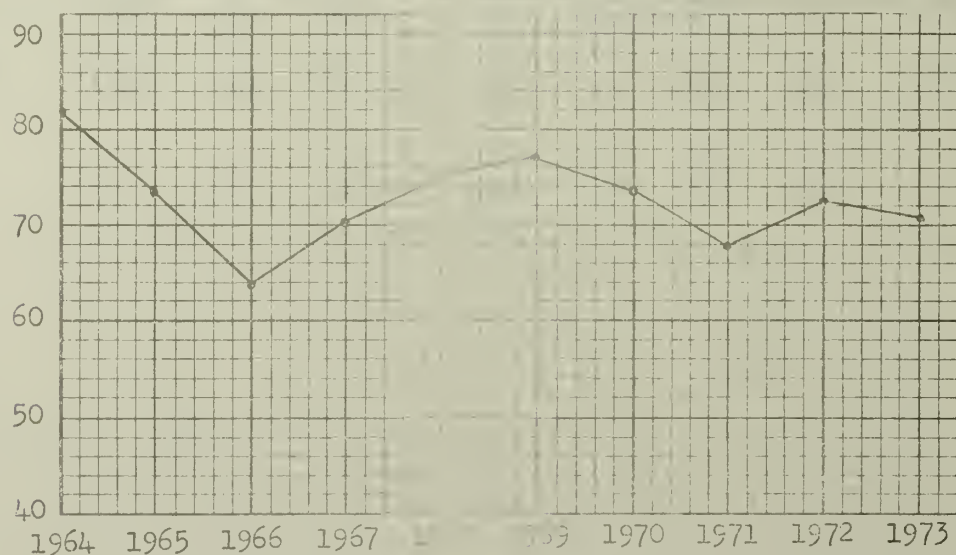


Table E - Findings at School Dental Inspections (per cent.)

		1973	1972	1971
	Not Requiring Treatment	35.5	36.4	32.2
Requiring Treatment	Receiving Treatment - School Dental Service	27.2	28.1	30.4
	Receiving Treatment - General Dental Service	17.6	17.0	17.0
	No Regular Treatment	19.8	18.5	20.4

Treatment

The trends were discussed fully in the Reports for 1971 and 1972. The picture presented in Table G shows satisfactory trends for mothers and pre-school children, with extractions diminishing rapidly and fewer teeth needing conservation. For school children the picture is far less satisfactory, and underlines the need for long-term research mentioned earlier.

Table F - Visits and items of treatment

	Mothers		Pre-School		School	
	1973	1972	1973	1972	1973	1972
Patients treated	141	154	1,100	1,091	24,706	24,729
Total visits	475	519	2,259	2,385	62,836	63,122
Courses commenced	180	170	1,235	1,233	28,127	28,083
Courses completed	147	146	1,025	1,037	26,623	25,781
Permanent teeth filled	321	376	-	-	37,755	35,329
Permanent teeth extracted for caries	86	113	-	-	1,869	1,752
Permanent teeth extracted for Ortho.	-	-	-	-	1,666	1,770
Deciduous teeth filled	-	-	1,776	2,081	16,836	16,809
Deciduous teeth otherwise conserved	-	-	82	119	1,075	1,638
Deciduous teeth extracted	-	-	792	870	10,246	11,070
General anaesthetics	4	7	173	305	2,050	2,837
Prophylaxis	91	88	326	141	4,488	3,519
Dentures	17	21	-	-	50	61
Patients X-rayed	26	36	13	10	2,792	2,546

Table G - Treatment per 100 patients

	Mothers		Pre-School		School	
	1973	1972	1973	1972	1973	1972
Fillings (permanent teeth)	254	271	-	-	183	173
" (deciduous teeth)	-	-	182	220	74	77
Total Extractions	61	73	72	80	56	58
Ratio of teeth filled to teeth extracted for caries(permanent)	4.2	3.3	-	-	20.2	20.2

Orthodontic Treatment

Table H gives an outline of the work carried out by the orthodontists and dental officers. Appliances only were used for 546 (30%) cases, appliances and extractions for 1,246 (68%) and extractions only for 33 (2%). Thirteen fixed and 1,168 removable appliances were fitted. Dental officers undertook a smaller number of cases than in recent years, treating 79 new cases (14% of all new cases). An increased number of children (112 in all) were referred by general practitioners to the County orthodontists. Mr. Everard and Mrs. Popplewell continued their attachment to the Orthodontic Department of Bristol Dental Hospital, thus keeping closely in touch with consultants. Mr. Everard continued his attachment to the Gloucester cleft palate unit. For patients requiring surgical treatment, full co-operation was received from the oral surgeons in Cheltenham, Gloucester and Bristol.

Table H - Orthodontic Treatment

	Number	Percentage of total under treatment	Percentage increase or decrease over 1972
Cases under treatment, 1973	1,831	-	-
New cases started in 1973	556	30	-3
Cases completed in 1973	459	25	+1
Cases discontinued in 1973	51	3	-1
Total completed or discontinued in 1973	510	28	-
Cases c/f to 1974	1,321	72	-1

Anaesthetics

Medical anaesthetists attended 213 general anaesthetic extraction sessions. They were also responsible for 11 special sessions, at Cheltenham and Gloucester, for prolonged anaesthesia for conservation for 27 patients, most of whom were severely subnormal. A second dental officer gave general anaesthetics on the equivalent of 33 sessions. "Relative analgesia" was used for a few patients who presented particular behaviour difficulties.

Local anaesthesia was used for just over 50% of extractions for school children, and nearly 10% and 77% in the case of pre-school children and mothers respectively.

Dental Laboratory

The laboratory continued as in previous years to carry out all work for dental staff of the County and the North Gloucestershire hospital clinical area. The apprentice left after one year owing to difficulties in meeting the academic standards required, but was replaced at once. The increasing complexity of some of the appliances for both orthodontic and surgical cases involved considerable expenditure of time. The totals are outlined in Table I.

Table I - Work of the Dental Laboratory

Ortho- donic Appliances	Dentures	Repairs and Relines	Crowns and Inlays	Study Models (pairs)	Splints and Special Appliances	Total No. of Operations
1,348	218	76	107	1,412	84	3,286

Training

Mr. D. K. Stables successfully passed the examination for Diploma in Dental Public Health, following his course at Bristol Dental Hospital.

Courses for dental surgery assistants were held at Gloucester Technical College and Bristol Polytechnic, and 3 passed the examination.

Several dental officers attended short courses, and Mr. Everard was present at the International Orthodontic Conference. Two of the dental auxiliaries attended the Annual Meeting of their Association, and Mr. Bilbruck from the laboratory a course on Facial Prostheses.

South Gloucestershire (Mr. D. K. Stables)

The year has been overshadowed by the forthcoming reorganisation of the National Health Service and also of Local Government. This therefore will be the last annual report that I write under the above heading.

It would seem that senior personnel in the dental section will not be in post before the Appointed Day. Future planning of services from April 1974 has therefore rebounded upon the present authorities, and much work that would have been better done by the new authorities has fallen upon the present staff. New financial restrictions would appear to mean that new premises at present only in the planning stage will be deferred for some time. This will almost certainly mean that maintenance of the present level of service will be extremely difficult. District boundaries have been drafted, showing that the Health Districts will not be coterminous with Local Authority Districts. South Gloucestershire will be split between the Districts of Southmead (Patchway, Thornbury and part of the Yate and Filton areas) and Frenchay (Downend, Kingswood, Cadbury Heath and remainder of Filton and Yate areas). Immediate change is unlikely.

Fluoridation will be the responsibility of Area Health Authorities in future, and it is to be hoped that Avon Area Health Authority will promote this important measure as a matter of some urgency.

Clinics

No new clinics have been opened nor building or any commenced. No re-equipment has taken place. Two mobile clinics are now more than 20 years old, and require early replacement. Patchway surgery is far from satisfactory - particularly the dark room - and equipment in several surgeries is becoming elderly; most equipment is obsolescent. With the present standard of equipment in training hospitals now of a high standard, recruitment of staff is likely to suffer unless modern equipment is installed. Urgent consideration should be given to provision of, at least, water heaters in mobile units, autoclaves, and automatic amalgamators.

Treatment

Dental Officers worked 3,210 (303 more than in 1972) clinical sessions and Dental Auxiliaries 541. In addition, 20 sessions were spent treating the boys of Kingswood Training School. General anaesthetic sessions were again reduced, this year by 4 over 1972, amounting to 26.

5,972 children inspected at school requested and required treatment. In addition, 2,414 were found to require treatment when seen at clinics. Of these 8,386 children, 8,278 were treated - 98.7%. The proportion inspected at school has again dropped, only 65.31% being seen. An additional 8.48% has been seen at clinics, making a total of 73.79%. Only one centre has really failed to inspect the school population, and excluding this, 74.02% of the remainder were seen at school and 6.97% at clinics - total 80.99%.

9,703 courses of treatment were provided for 8,278 schoolchildren. With the present staff, treatment of 10,000 children should be possible - can we make this a target for 1974? We have, in fact, treated fractionally fewer schoolchildren each session for the second year in succession. 698 courses were given to mothers and pre-school children. Of these, 132 were for mothers and 536 for pre-school children. The latter figure is 184% of the previous year's total, but is still only a fraction of the pre-school population. More mothers were seen too - as in previous years, nearly all at Yate. Overall, 90.86% of courses commenced were actually completed.

Prevention

The whole point of community dentistry is to prevent dental disease, and secondarily to treat what we have failed to prevent. Unfortunately, there is so much dental disease in the community that most of our time is taken up treating it, and little is left over for prevention.

Gloucestershire has been extremely fortunate in that it has had people of foresight at the helm and many years ago the beginnings of a dental health education service was started. At the beginning of the year, the situation in this part of the County looked reasonably well. Mrs. Miles' departure to train as a Dental Hygienist left the two auxiliaries with an increased commitment which they shouldered bravely. The resignation of one of them has placed an intolerable burden on the other, and it is now hoped that two dental health assistants will shortly be taking some of the work load.

There has been a slight drop in the percentage of 5 year olds caries free, but experience has shown that one year's results cannot be taken on their own. Several schools with a very low caries prevalence were not inspected this year, and the figures for 1974 will be watched with interest.

The value of the dental health team is known to all staff in the dental section, and to many Health Visitors etc. It is the only team of its kind in the new Avon area, and it is to be hoped that it will be expanded to cover the whole of the new Authority. It would be a tragedy if, for lack of foresight, this work were to be allowed to lapse.

Other Projects

Records of missing teeth are still kept, although analysis of the results has yet to be done.

The headmaster of one of the SSN schools, in consultation with the dental officer concerned, requested that fluoride tablets be given through the school. This has developed into a scheme promoted by Bristol Dental Hospital affecting all junior special schools in the area. As yet, the baseline study is incomplete and many questions still need to be answered before such a scheme can be started.

Facilities have been made available at Downend and Kingswood to Mr. R. G. Smith of Bristol Dental Hospital so that he can conduct research into the eruption of teeth.

My study of the caries prevalence figures collected throughout the County over the last few years produced interesting results, and work is continuing on them.

In conclusion, I should like to thank all the staff who have helped during the past year to make dentistry a little more acceptable to children in the area. In particular, I would like to thank my dental surgery assistant, Mrs. Black, who has taken a considerable amount of work off my back and on to her already overloaded one.

I would also like to express my appreciation of all the help given by the Dental Office staff, Mr. Smyth and Mr. Pengelly, not only just in the past year, but in the whole of the time I have been associated with Gloucestershire.

Conclusion

This Report is a farewell to the local authority dental service in Gloucestershire. In writing the history of the service, I have become more deeply conscious than ever of the debt owed to so many people. We should honour the memory of the few individuals who were interested enough to provide services in their own villages. Since 1914 the County Council and its Education Committee - and since 1948 its Health Committee - have taken a practical interest in the shape of support and funds to provide an imaginative service rather than the statutory minimum. It is this interest and support which have made Gloucestershire such a pleasure to work for.

The overall responsibility for the service has always rested with the medical officer of health and principal school medical officer. Here again we have been fortunate. Dr. Middleton Martin was a man of great ability and vision. Dr. (later Sir Kenneth) Cowan initiated the revival in 1948. To Dr. Bramley goes the credit for so many of the ideas that have been put into practice in the last 20 years, and Dr. Withnell has carried on the tradition of support for the dental services in times of constant change and increasing pressures.

Yet the service depends for its successful functioning for the benefit of the children in the County on the staff in the field. Here again we have been very fortunate in having so many keen young men and women, particularly in recent years. I am glad to pay tribute to the unfailing help I have had over the years from Mr. Pengelly, and from the area dental officers, of whom particular thanks must go to Mr. Stables (and his dental surgery assistant, Mrs. Black) for what he has done in the past year to prepare for the separation of the South into the new Avon Health Authority, and thus ease transfer problems.

I am glad to acknowledge the debt we owe to the "lower paid workers". Success or failure of a dental clinic depends to a very great extent on the dental surgery assistant. Some of these have done far more than could ever

have been expected of them, and certainly more than they were paid to do. Again, the central dental office staff have shown a dedication to the service which has often been a wonder and at all times a cheer to me. I know the dental staff in the field value them highly: only I know how much work this has entailed in the background. The dental laboratory has earned for itself a tremendous reputation, and few in the country can equal the skill and versatility that have been developed.

Last, but certainly not least, I thank the dental health team. Their enthusiasm has been a constant joy and stimulus to me. The team is, I believe, unique: a great deal of credit belongs to the first dental health education officer, Miss Ryley (now Mrs. George), who developed it. Its recent developments, and the excellent relationships established with health visitors and others in the field, are the work of Mrs. Miles. Her constant help, imagination and devotion to the service in various capacities over so many years have been deeply appreciated by myself and many others.

My personal thanks go to all of these. It is my hope they will be able to carry on in strength in the new Health Authorities in Gloucestershire and Avon. I wish them well.

Many others have played an important part - in particular teachers and other school staff. It is essential that the close links that exist be maintained despite separation of health from education services. Health visitors, district nurses, health education and other staff of the Health and Education Departments have all contributed their share. Our thanks go to them all.

LABORATORY FACILITIES

(a) Public Health Laboratory Service

The excellent relationship which has always existed with Dr. A. E. Wright at the Public Health Laboratory, Gloucester has been maintained. We are also very indebted to Dr. H. R. Cayton, of the Bristol Public Health Laboratory, for his help in the Southern parts of the County. Arrangements were made to assist Dr. R. E. Hope-Simpson at the Public Health Virus Laboratory at Cirencester, by arranging for a health visitor to be available to him for collection of epidemiological specimens in connection with any influenza outbreak.

(b) Public Analyst

The services of E. G. Whittle, Esq., B.Sc., F.R.I.C., were available to the Council as Public Analyst. His help during the year has been much appreciated.

HEALTH CENTRE

The Centres at Hesters Way, Kingswood, Thornbury and Yate continued to provide medical and health services to their neighbourhoods. The experience gained in running these centres has enabled a satisfactory pattern of administration to be continued and developed with regular house meetings and occasional meetings of medical staff.

On 5th November the big new centre at Stroud opened very smoothly. It now provides a full range of services including, besides those offered by fourteen general practitioners, family planning, speech therapy, audiology, chiropody, child health, parentcraft, cytology, orthopaedic, marriage guidance, and dental. As an experiment the local clergy attend on a rota basis and a minister is therefore available each day. It is too early to assess the value of this experiment.

Friendly working relationships have been established with the staff of the Area Social Services Department, with the Child Guidance Unit who work in the same building and with the Training Centre which is housed in a separate building on the site. There is every prospect of Stroud becoming a successful Health Centre in terms of providing an integrated Health Care service to the community.

The continuing rise in health centre building, both locally and regionally indicated a need for more serious thought to be given to the recruitment and training of Health Centre Supervisors and of those who controlled them. There appeared to be no suitable courses for Supervisors and in November a short course was mounted at Sandywell Park. The demand for places was considerable and eventually a group of supervisors, administrators and medical officers spent a few days considering the administration of these centres. Members came from Cheshire, Hampshire, London Boroughs, Nottingham, Oxford, Isle of Wight, Berkshire, Lancashire, Surrey, Sussex, Worcestershire and the University of Kent. A great deal of help and information was obtained. It is hoped that the Training Officers of the new Health Service will follow up this initial course and ensure that the development of staff keeps pace with the rising number of centres.

CERVICAL CYTOLOGY

The teething troubles in connection with the 5 year recall for smears from the Central Register seems to have settled somewhat, however, anxiety still arises when women over the age of 35 are requested to have a smear taken before the 5 year limit.

Social Classes	Number of Smears Taken	
	1972	1973
I and II	781	877
III	1,476	1,728
IV and V	709	774

STAYWELL CLINIC

The close liaison between the Gloucester City and County Appeal for Prevention of Cervical Cancer and this authority has continued, and Departmental Medical Officer time has again been allocated to the Staywell. Visits to factories have continued and the clinic has also been used to clear a backlog of appointments at several static clinics.

A total of 705 patients were screened during the year.

OBSERVATION REGISTER

Total number of children on the Observation Register - 2,292.

CHILD HEALTH CLINICS

The valuable work carried out in these clinics continued during 1973, and again I am indebted to the voluntary workers who give of their time so freely. During the year, sessions were held at 108 static clinics, and clinics were also held in seven general practitioner premises.

The numbers of children who attended clinics were:-

Born in 1973	5,397
1972	6,406
1968-71	<u>12,612</u>
	<u>24,415</u>

MOBILE CHILD HEALTH CLINIC

The proposed curtailment of the mobile clinic programme did not take effect until the end of the year and the vehicle therefore continued its programme, visiting 66 villages. The vehicle was again used as a family planning clinic.

ILLEGITIMATE INFANT DEATHS

Of the 327 illegitimate births notified, 5 were stillborn: 2 illegitimate children died under the age of one year. The illegitimate infant mortality rate was 22.8 per 1,000 live births compared with 16.0 per 1,000 for the legitimate infant deaths.

STILLBIRTHS

Of the 72 stillbirths notified only two took place at home. The stillbirth rate per 1,000 total births for the past four years has been as follows:-

1970	10.6
1971	9.6
1972	8.5
1973	9.0

Family Planning

In April, 1973, the Local Authority took over 11 clinics in the Gloucester Branch of the F.P.A. with no disruption of the service; these clinics all lie within the area that will be the future Gloucestershire. That part of the county that will go to Avon is still served by the Bristol branch of the F.P.A. with whom we have an agency agreement.

At the same time the Health Committee agreed to be responsible for the consultation fees for all Gloucestershire residents and an agency agreement was arranged with the Brook Advisory Clinic.

Also in April a free vasectomy service was started and specially trained surgeons were recruited to perform these operations for medical and social cases at peripheral hospitals, - by the end of the year there were five centres where this can be carried out. Counselling is done either by the patient's general practitioner, or if preferred by a specially trained doctor on our staff. One hundred and ninety-one operations were done up to the end of 1973.

There has proved to be a need for clinics for psycho sexual and marital problems and we have two doctors with special training who hold such clinics.

We continue to have appreciation courses for nursing staff and have included a number of hospital nurses and members of the social services in each course. All our staff have now attended one of these 2 day courses and the g.p 's are increasingly gratified for the help that their attached nurses are able to give in this field.

A number of one day conferences have been held during the year for doctors and nurses and a constant up-dating of information is maintained. The medical representatives of the drug firms keep us informed of new pills and appliances and it is our boast that we have an expert to discuss the new advances with the medical officers and general practitioners within a day or two of its appearance on the market. These conferences are becoming very well attended.

One wonders what will happen to our very successful scheme on 1st April, 1974 and we can only hope that it could be the blue print for a national scheme.

VACCINATION AND IMMUNISATION

VACCINATION OF PERSONS UNDER AGE 16 COMPLETED DURING 1973.

Table 1 - Completed Primary Courses - Number of persons under age 16

Type of vaccine or dose	Year of Birth					Others under age 16	Total
	1973	1972	1971	1970	1966-1969		
1. Quadruple DTP	-	-	-	-	-	-	-
2. Triple DTP	175	5817	1997	567	937	10	9503
3. Diphtheria/Pertussis	-	-	-	1	-	-	1
4. Diphtheria/Tetanus	5	143	70	38	126	14	396
5. Diphtheria	-	-	-	-	1	-	1
6. Pertussis	-	-	-	1	-	-	1
7. Tetanus	-	-	-	-	8	500	508
8. Salk	1	-	1	-	-	-	2
9. Sabin	179	5963	2084	607	1192	103	10,128
10. Measles	3	2531	3094	697	1018	55	7398
11. Lines 1+2+3+4+5 (Diphtheria)	180	5960	2067	606	1064	214	9,901
12. Lines 1+2+3+6 (Whooping Cough)	175	5817	1997	569	937	10	9,505
13. Lines 1+2+4+7 (Tetanus)	180	5960	2067	605	1071	524	10,407
14. Lines 1+8+9 (Polio)	180	5963	2085	607	1192	103	10,130

Table 2 - Rubella.

1. Number of girls vaccinated between their 11th and 14th birthday	4877
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Table 3 - Reinforcing Doses - Number of persons under age 16

Type of vaccine or dose	Year of Birth					Others under age 16	Total
	1973	1972	1971	1970	1966-1969		
1. Quadruple DTPP	-	-	-	-	-	-	-
2. Triple DTP	-	73	334	64	486	46	1003
3. Diphtheria/Pertussis	-	-	-	-	-	-	-
4. Diphtheria/Tetanus	-	-	-	-	8428	168	8596
5. Diphtheria	-	-	-	-	1	1	2
6. Pertussis	-	-	-	-	-	-	-
7. Tetanus	-	-	-	-	37	1749	1488
8. Salk	-	-	-	-	-	-	-
9. Sabin	-	6	276	51	9030	1168	10531
10. Lines 1+2+3+4+5 (Diphtheria)	-	73	334	64	8915	215	9601
11. Lines 1+2+3+6 (Whooping Cough)	-	73	334	64	115	46	1003
12. Lines 1+2+4+7 (Tetanus)	-	73	334	64	8953	1663	11087
13. Lines 1+8+9 (Polio)	-	6	276	51	9030	1168	10531

Number of persons vaccinated through the Authority's approved arrangements under Section 28 of the National Health Service Act.

A. CONTACTS (Circular 19/64)

- i. Skin tested 431
- ii. Found positive 83
- iii. Found negative 348
- iv. Vaccinated 324
- v. Babies vaccinated at birth 19

B. SCHOOL CHILDREN AND STUDENTS (Circular 19/64) excluding those known to have received BCI vaccination already

- i. Skin tested 8,766
- ii. Found positive 596
- iii. Found negative 7,994
- iv. Vaccinated 7,940

AMBULANCE SERVICE

a) Cases Carried and Mileage in 1973.

Patients					Mileage				
(1) Ambs.	(2) Buses	(3) Cars	(4) H.C.S.	(5) Total	(1) Ambs.	(2) Buses	(3) Cars	(4) H.C.S.	(5) Total
76,447	63,799	73,010	66,334	279,590	725,746	237,269	512,148	864,676	2,339,839

The corresponding totals for 1972 were 329,766 patients and 2,528,140 miles. The 1973 figures do not include patients carried or miles run after 13th November when industrial action was commenced by Ambulancemen and which continued until after the end of the year.

The Hospital Car Service continues to give valuable assistance and the Service is heavily dependant on the volunteer drivers who give many hours to this work.

b) Personnel

Staff in post at the end of 1973, excluding H.Q. staff (7) was as follows:-

3 Superintendents	18 Sub Officers
14 Control Operators	Ambulancemen
4 Station Officers	Ambulancewomen

c) Vehicles

Vehicle strength at the end of the year, including reserves:-

36 Ambulances	28 Sitting Case Vehicles
14 Bus-type vehicles	4 Equipment Vehicles

d) Training

* Four Induction courses were held for new entrants and 11 men successfully completed their six weeks course at the Regional Training School.

Seven Control staff attended Control Courses at Stafford and 16 Sub Officers attended Supervisors Courses at Leicester.

One man obtained an Instructors Certificate in Ambulance Aid.

One man passed the examination of the Institute of Certified Ambulance Personnel, two passed the Graduate Examination of the Institute of Ambulance Officers and one, the Associate examination of the same Institute.

The advanced training of ambulancemen continued at Frenchay and Cheltenham General Hospitals and training was also commenced during April at the Gloucestershire Royal Hospital.

Twenty three courses of instruction in First Aid or Resuscitation were given by Service Instructors to schools or other bodies. Speakers were also provided for talks to 31 meetings of voluntary organisations. The number of visits to Ambulance Stations by youth organisations and new members of nursing staff increased to 27.

HEALTH EDUCATION

Over one hundred years ago the then Prime Minister of this country said in the House of Commons "the health of the people is the surest foundation upon which the happiness and prosperity of the state depends". This must surely have been the first official though indirect reference to the need for health education.

In 1927 the Central Council for Health Education was established as part of the Ministry of Health and by 1963 this Council was spending about £125,000 a year on central planning and the provision of material for Health Education throughout the country.

Various organisations and professional bodies have been partially involved in health education for many years but their efforts, although valuable, have lacked co-ordination and none have had sufficient finance to further the vast amount of research and investigation into the needs, methods and targets of health education so necessary to make it a success.

Many public health measures affecting the health of the people have been taken by central government, but the most direct action concerning health education was taken in 1959 when the Cohen Committee was set up to consider where health education might be expected to be of benefit to the public and what methods were likely to be most effective.

The Cohen Committee reported in 1964 and made 43 recommendations on health education. One was that the government should set up a central body to 'promote a climate of opinion favourable to health education, to develop blanket programmes and to foster the training of 'specialist health educators'. This body was set up as the Health Education Council for England and Wales in 1967 and now spends as much on one campaign as the previous council spent in one year, e.g. the present "smoking in pregnancy campaign".

The report also said there was 'scope for a new profession, that of health education officer', and suggested the type of training necessary. From this report, health education has grown.

In Gloucestershire the history of health education would seem to start in 1948, the year of the last National Health Service reorganisation when it is first mentioned in the report of the County Medical Officer of Health, Dr. George Bramley, as part of the health visitors' duties and was mainly concerned with education in the home with individual parents and also in group discussions in what were then called child welfare centres and now known as child health clinics.

In the following years, health education is either not considered worthy of mention at all or is mentioned only as part of the function of the health visitor.

In 1955 health education is mentioned as 'not progressing' and in 1956 it was reported that the Deputy Health Visitor Superintendent was paying particular attention to health education by arranging suitable visual aids for health visitors who wanted to give talks in clinics. In the 1957 report of the Principal School Medical Officer, the first mention is made of the need for sex education in schools, and that the health education was mainly carried out by "individual propogation". In 1961 it was reported that health visitors had given 41 talks which by 1966 had reached a total of 1,095 talks, mostly to expectant parents at ante-natal classes.

It is significant that in 1957 the Gloucestershire vital statistics showed the infant mortality rate was 28.32 per 1,000 population and in 1966, the infant mortality rate was 15.9 which was 3.1 lower than the National average, the lowest ever recorded. Improved medical knowledge and better public health measures and services have all contributed to these improved figures but massive health education measures were also necessary to educate the women to take advantage of the services available to them and change their behaviour patterns to ensure better health for mother and child.

In 1964 the Deputy Health Visitor Superintendent was appointed as Health Education Officer for the county so that Gloucestershire were well in the forefront of local authorities realising the need for and appointing an officer with the specific responsibility for health education within the community, but for some years following that health education remained mainly in the province of the health visitor. It was not until 1969 that health education was divorced from the health visiting service and become a section on its own with a health education officer, an assistant health education officer, an artist and a projectionist.

It was in 1970 that the scope of the section began to enlarge with the introduction of displays on different aspects of health education in all clinics and this now includes the new health centres and some doctors' surgeries.

In September, 1972 the original health education officer, Miss F. Fortnam retired and Mrs. R. H. Rice was appointed in November, 1972 with responsibility for the city as well as the county and in March, 1973, a new Assistant was appointed, bringing the staff back to its original level of four, but with responsibility for 661,600 total population, 90,950 more than was covered by the previous health education officer. Towards the end of 1973 a health education lecturer was appointed to cover gaps in the routine programmes which could not be covered by field staff. This was a particular need in the city where hardly any health education is undertaken by field staff.

The work in the health education unit in 1973 has continued to grow. Smoking, venereal disease and family planning are again the main themes as the national figures show these are the main subjects needing special attention. A great deal has been done in training field staff from all disciplines in health education methods and in specific subjects.

Smoking

A 'stop the smoking campaign' was started at the end of the year to be carried on into 1974. Six displays have been sited at various places within the city.

173 talks were given on the dangers of starting to smoke to 7,575 junior school children.

21 talks were given to adult groups.

Venereal Diseases

34 talks were given by the health education unit staff to groups of teenagers.

The film on venereal disease has been loaned to senior schools 71 times which indicates that a lot of health education on venereal disease is being done in the schools.

A display on the subject has been placed in eight different towns in the county throughout the year.

Family Planning

Family planning shows the same picture as venereal disease, 32 talks have been given to lay audiences, but the film has been loaned 67 times to senior schools.

Staff Training

The health education staff have been involved in staff training sessions throughout the year.

A two day course for new health visitors was held in the Shire Hall. Four half day courses for pupil midwives have been arranged. A number of evening sessions have been arranged for the education of playgroup leaders and one afternoon session for the education of home helps concerned with health in the home. The unit also services the training sessions for health visitors carried out by the Family Planning Association. Three special courses on education in personal relationships were arranged at the request of youth organisers at youth clubs and a course for student teachers in health education was arranged in May.

Talks given through the health education unit excluding the preceding main themes.

In schools 594.

To adult organisations 287.

Parentcraft talks to adults 1,914

Total talks to adult groups 2,263

Total talks on all subjects to all groups 3,134

Films have been loaned on 567 occasions, other visual aids issued 1,263.

38 new visual aids have been made or purchased.

87 displays have been shown throughout the county during the year.

A survey to evaluate the use of displays in health centres was carried out in Yate, chosen because it was a well established centre with a well used display site.

A total of 248 persons were interviewed.

112,45% had noticed the display

35 of these had taken action as a result of the advice given in one or other of the displays.

When asked what subjects they would like more information about, the following were the main subjects mentioned.

General Cancer	29	Slimming and Nutrition	7
Chests and Smoking	16	Safety	6
Services Available	8	Rheumatism	3
Childrens Ailments		Migraine	3
and Care	25	Heart	6
Dental Care	6	Drug Abuse	3
Mental Health	8		

The low number of persons who noticed the display proved to be due to bad positioning in that persons making appointments to see the doctor, collecting prescriptions and visiting the occupational therapy class did not pass by the display. This has been corrected as far as possible within the limits of the building.

COMPUTER

The Annual Report for 1972 gave an evaluation of the Gloucestershire system for Child and School Health records. The data recorded on individual records is increasingly used for purposes other than those for which it has been primarily collected, i.e. to have an up-to-date quickly accessible record monitored to follow up the child at risk of or found to be handicapped, together with vaccination and immunisation follow-up. There has been a greater volume of ad hoc enquiries made of this data and answers have been possible to a wide range of questions. Examples are:-

- (a) Identification of children at risk of battering; or who have died where battering was a possible factor.
- (b) Children born to mothers of specified ages.
- (c) Analysis of handicaps according to defined parameters.
- (d) Identification of children transferring from a general medical practitioner who is retiring.

The installation of a V.D.U. terminal in the department, together with the transfer of the school health files to disc and operation via GEORGE III have given access to records via direct communication with the computer. Plans were made for further terminals to be put into operation in the Gloucester City and Cheltenham Borough health departments but this development has been shelved until the new health districts, to be established under reorganisation, have been established.

Reorganisation will inevitably mean programme alterations, due to the creation of health districts, the disappearance of Gloucester City as an independent authority and of Cheltenham Borough as a delegated authority and the splitting of the old county between the new Gloucestershire and Avon Area Health Authorities. As ever, the programming staff of the County Treasurer are rising to the occasion and are preparing the necessary alterations with their fullest co-operation. Both of the new Area Health Authorities have asked the new County Council to provide an agency service covering the territory of the present county and this has been agreed most readily.

A new management data system for the Ambulance Service commenced on the 1st April. Basically the input to computer of three types of form gives operational analyses covering such data as analysis of patients carried, vehicle mileage, petrol and oil consumption, work loads of stations, vehicle availability and serviceability. The three types of form are:-

- (a) Daily Vehicle Schedule.
- (b) Weekly Return of Vehicles Not Used.
- (c) Monthly Petrol/Oil Return.

Paper work by drivers, control staff and headquarters staff is minimised whilst the output in terms of management and operational data are more detailed and of greater accuracy and value.

Under the management arrangements for the new health service, responsibility for computer schemes will be vested in the Regions. At the moment there is great expertise in the local government service, much of which will not be transferrable to the health service. One hopes that this expertise will not be lost or ignored and that ways will be found of continuing to make use of such knowledge.

REGISTERED NURSING HOMES

At the end of the year there were thirteen nursing homes registered, providing 209 beds for general cases.

HOME NURSING REQUISITES

The British Red Cross and the St. John Ambulance Brigade continued to act as agents for the temporary loan of articles. The organisations maintained 60 depots through the efforts of their voluntary workers. Articles required for long periods or permanently are supplied from the Health Department.

RENAL DIALYSIS IN THE HOME

Adaptations to six homes were carried out during the year, making a total of 26 machines which had been installed since the scheme commenced in February, 1970.

TUBERCULOSIS

Report of F. J. D. Knights, Esq., M.D., F.R.C.P.
Senior Chest Physician, North Gloucestershire Clinical Area.

In 1973 thirty two cases were notified in the North Gloucestershire Clinical area. They are analysed as follows:-

Abdominal Orthopaedic and Cervical glands	Primary or post primary infection	Minimal phthisis	Moderate phthisis	Advanced phthisis	Total
6	1	7	17	3	34

Twelve cases were referred by their general practitioners, thirteen from other hospital departments, two were contacts, two were picked up by the Mass X Ray Unit, and one was a relapse, and two from other source.

Two were immigrants from Australia and Southern Ireland respectively.

Contact Examination

Arising out of these notifications 130 adult contacts were called for examination and 103 attended.

ANNUAL REGISTER OF PATIENTS EXCRETING RESISTANT TUBERCULE BACILLI IN
THE BRISTOL CLINICAL AREA (1957 - 1973)
AS ON 31st DECEMBER, 1973

YEAR	NEW CASES IN YEAR	RESISTANCE PRIMARY ACQUIRED		DEAD	QUIESCENT	TRANS- FERRED	ALIVE AND ACTIVE	NUMBER ON REGISTER ON 31st DEC. EACH YEAR.
1957	44	10	34	23	12	9	0	44 - 1957
1958	31	3	28	17	12	2	0	36 - 1958
1959	29	4	25	8	21	0	0	32 - 1959
1960	16	1	15	8	5	3	0	35 - 1960
1961	20	2	18	6	12	2	0	45 - 1961
1962	15	3	12	4	10	1	0	30 - 1962
1963	13	2	11	2	8	3	0	27 - 1963
1964	10	2	8	3	5	2	0	21 - 1964
1965	15	5	10	2	12	1	0	26 - 1965
1966	13	0	13	7	5	1	0	24 - 1966
1967	8	1	7	1	5	2	0	15 - 1967
1968	11	2	9	3	7	1	0	12 - 1968
1969	10	6	4	0	9	1	0	15 - 1969
1970	10	0	10	3	5	1	1	6 - 1970
1971	5	1	4	1	4	0	0	6 - 1971
1972	10	4	6	1	8	1	0	12 - 1972
1973	2	1	1	0	0	0	2	3 - 1973

NOTES

- 1 Only 2 new cases of Resistant Tubercle Bacilli were reported in 1973 - the lowest number since records were first kept in 1957.
- 2 In 1972 10 new cases were reported but in 8 of these the disease is now quiescent, one patient has died and one has been transferred.
- 3 One patient, first reported in 1970, remains active with T.B. resistant to Isoniazid - a non-cooperator!
- 4 Only 3 patients were therefore alive with resistant Tubercle Bacilli in their sputum at the end of 1973 - all three with resistance to one drug only.
- 5 This very satisfactory position is due not only to the efficiency of modern anti-tuberculous chemotherapy but largely to the hard work and efficiency of the Health Visitors, District Nurses and Chest Clinic Nursing Staff who have been untiring in their efforts to ensure that the few difficult and non-cooperative patients were closely followed up and received full and continuous chemotherapy.

VENEREAL DISEASE

Report by A. E. Tinkler, M.A., M.D., D.P.H.
Consultant Venereologist, South Western Regional Hospital Board

In 1973 there was a further considerable increase in the number of County residents seen at the Venereal Disease Clinics held at Gloucester, Cheltenham and Bristol.

TABLE 1 New cases all conditions - Gloucestershire County residents

<u>Year</u>	<u>New Cases</u>
1969	715
1970	969
1971	876
1972	1041
1973	1418

SYPHILIS

The incidence of this serious disease remains low in the county. Two cases in the early, infectious, stages of the disease and three in the late, non-infectious, stages were seen in county residents in 1973. There were no cases of congenital syphilis.

GONORRHOEA

In contrast to 1972 there was a significant increase in the incidence of gonorrhoea amongst county residents in 1973.

TABLE 2 Incidence of Gonorrhoea

<u>Year</u>	<u>New Cases</u>
1969	155
1971	275
1972	206
1973	234

WATER SUPPLIES AND SEWERAGE

Fifteen schemes of sewerage and sewage disposal and nine water supply schemes were considered by the County Council during the year. The estimated cost of these schemes totalled £3,069,427 for sewerage schemes and £41,226 for water schemes.

In the financial year 1972/73, the County Council's contributions under the County scheme for financial assistance to District Councils totalled £235,682, £35,712 for water supply schemes and £199,970 for schemes of sewerage and sewage disposal.

Details of the schemes considered by the County Council are set out below (estimated costs in brackets).

A. SEWERAGE AND SEWAGE DISPOSAL

CHELTENHAM RURAL DISTRICT

Buckland Sewerage Scheme (50,000)

To serve 19 properties at Buckland by a pumping scheme to the Laverton sewage disposal works, with provision for a future 21 properties. The scheme was strongly supported on public health grounds.

CIRENCESTER RURAL DISTRICT

(i) Kemble Area sewerage and sewage disposal (£216,300)

To serve 158 properties at Kemble and 32 properties at Ewen. The cost of the Ewen section was considered excessively high and the scheme was approved with a recommendation that the District Council should reconsider that part.

(ii) Lechlade sewage disposal works extensions (£365,000)

A scheme, to extend the existing disposal works to permit further development in the village and also to receive sewage from Eastleach and Southrop in Northleach Rural District, was approved.

EAST DEAN RURAL DISTRICT

(i) Blakeney Sewerage Scheme (179,000)

To serve three separate parts of the village of Blakeney outside the area served by the existing sewerage system, and to extend the sewage disposal works to receive these additional flows and to permit substantial new development in the future. The scheme was supported on public health grounds and approved.

(ii) Plump Hill, Mitcheldean (£89,000)

A scheme to connect 85 houses and a school by pumping to the Mitcheldean sewerage system was supported on public health grounds, and approved.

GLOUCESTER RURAL DISTRICT

Sandhurst Lane, Longford (£13,772)

To connect a large caravan site, partly used as a gypsy site by pumping to the Gloucester sewerage system. The alternative of a septic tank system was impracticable because of the high water table. The scheme was approved.

NEWENT RURAL DISTRICT

Newent, Cleeve Lane Sewage Disposal Works Extensions (£304,000)

A scheme to modernise and enlarge the existing sewage disposal works to cope with the planned development of Newent and surrounding area. The scheme was strongly supported and approved.

NORTHLEACH RURAL DISTRICT

Coln St. Aldwyns Sewerage Scheme (£105,000)

A scheme to connect the village of Coln St. Aldwyns to the Quenington sewerage system to serve 84 houses and a school was supported on public health grounds and approved.

SODBURY RURAL DISTRICT

(i) Alderley and Hillesley Sewerage Scheme (£84,100)

A resubmission of a scheme previously considered in 1968, redesigned following a decision to replace the Kingswood sewage disposal works by a new works at Charfield. The scheme was approved.

(ii) Chipping Sodbury Relief Sewer (£314,000)

A scheme to relieve the existing overloaded sewers and additionally to provide for substantial new development in the future was approved, subject to minor comments.

STROUD RURAL DISTRICT

(i) Oldends Sewerage Scheme (£96,255)

A scheme to provide a first time service for 26 properties (and a small industrial estate), to replace an obsolete sewer serving 44 properties and to provide for future development of some 25 acres as an industrial estate, was approved.

(ii) Regent Street, Stonehouse, sewerage scheme (£44,000)

A scheme to replace a section of large diameter sewer serving a large part of Stonehouse. Following frequent flooding and surcharging, the sewer was examined by a television survey and found to be in very poor condition. The scheme was strongly supported on public health grounds.

THORNBURY RURAL DISTRICT

(i) Charfield Sewage Disposal Works (£430,000)

A scheme to replace the existing sewage disposal works at Kingswood with a new large works at Charfield was considered to have advantages over the alternatives of enlarging the Kingswood works or of having two smaller works at Kingswood and Charfield. The scheme was supported on public health grounds and approved.

(ii) Oldbury Drainage Scheme (£254,000)

A scheme to serve 240 existing properties in the villages of Oldbury, Oldbury Naite, Littleton, Cowhill and Kington, with provision for substantial infilling at Oldbury and possible development at Kington was supported and approved, subject to a number of comments by the County Surveyor.

WEST DEAN RURAL DISTRICT

Northern Area Pollution Control Scheme (£525,000)

Following a recommendation of the County Council, subsequently endorsed by the Department of the Environment, this joint scheme was submitted to enlarge the Lydbrook sewage disposal works in West Dean Rural District so as to serve the expanding needs of the Lydbrook area and also the areas of Ruardean Woodside, the Pludds and Brierley in East Dean Rural District. The scheme was strongly supported and approved.

B. WATER SUPPLIES

BATH WATERWORKS

Leigh Lane, St. Catherines (£1,950)

A scheme to provide mains water to five isolated premises, at present served by a heavily contaminated private spring source, was approved.

COTSWOLD WATER BOARD

(i) Hidcote Bartrim, Ebrington (£2,785)

To extend the Ebrington - Hidcote Boyce main to serve Hidcote Bartrim House (a National Trust Property), twelve other domestic properties and a farm. With the increasing number of visitors, the present private supply is now inadequate and the Trust requested the provision of a main supply and agreed to make a capital contribution towards the cost.

The scheme, justified on public health grounds, was approved.

(ii) Honeycombe Leaze, Fairford (£5,000)

A small mains extension to serve one farm and seven other dwellings. The existing supply, from a well at the farm, is inadequate to maintain a reasonable supply and the quality is suspect.

The scheme, justified on public health grounds, was approved.

NORTH WEST GLOUCESTERSHIRE WATER BOARD

(i) Chalford, Oakridge Road (£5,634)

Submitted at the request of the Stroud Rural District Council this scheme will provide mains water to five existing properties where the present supply is from unsatisfactory wells and springs, and in one case from a polluted stream. The scheme was supported on public health grounds.

(ii) Cleeve Hill, Lye Lane (£1,745)

A scheme to augment the supply to 13 domestic properties, at present supplied by a very inadequate main.

The scheme, justified on public health grounds, was approved.

(iii) Great Washbourne water supply (£7,165)

This scheme, to give a first time service to 24 existing properties (including 2 farms) and to improve the present supply to a further 5 properties, was requested by the Cheltenham Rural District Council. The existing private supply to the properties is inadequate and bacteriologically unsatisfactory.

The scheme was strongly supported on public health grounds, and approved.

(iv) Prestbury, Queenswood Grove (£5,561)

A small scheme to provide a first time service to eight existing properties at present supplied by a well which is inadequate to meet the demand. The supply to a further five properties having very long service pipes, will be improved. The scheme, requested by the Cheltenham Rural District Council, was strongly supported on public health grounds and approved.

(v) Thorougham, near Bisley (£4,564)

A scheme to provide a mains supply to 13 houses and 1 farm. The existing supply is from shallow wells pumped to storage tanks and is bacteriologically unsatisfactory. As a temporary measure a small diameter pipe was connected to the storage tanks to provide mains water, but the whole system is now in need of replacement.

The scheme was approved.

(vi) Tunley, Stroud water supply scheme (£6,822)

Submitted at the request of the Stroud Rural District Council, this scheme will provide a mains water supply to eight existing properties at present served by wells and springs which are intermittently polluted. The scheme was supported on public health grounds and approved.

GYPSIES

Authority has been given for the provision of two additional pitches at the Cinderford gipsy site, bringing the total number of pitches now available to 54, all of which are fully used. No further progress has been made with the provision of a site in South Gloucestershire due to continued local opposition.

An invasion by a group of twenty-seven families on to the old Tewkesbury station emphasised the need for a short term transit site to which such travelling groups could be directed and negotiations are in progress for the acquisition of a site for this purpose.

MILK SUPPLY

(i) Licences

During the year one of the two holder plants ceased to operate. The number of H.T.S.T. (High Temperature Short Time) plants remained unchanged but one dairy, where both sachets and bottles were used, discontinued bottling and bought their bottled milk supply from an associated dairy out of the County. At the end of the year there were eight H.T.S.T. plants and one holder plant treating approximately 30,000 gallons of milk per day.

The number of milk licences in operation at the end of the year totalled 604 as shown below:-

	<u>1973</u>	<u>1972</u>
(a) Producer/Retailers (licensed by the Ministry of Agriculture, Fisheries and Food and including two Producers who retail raw milk by consent).	47	58
(b) Producer/Retailer included in (a) above holding a licence from the County Council to bottle Untreated Milk from other Producers.	2	2
(c) Dairies dealing in Untreated Milk other than in (a) or (b) ("B" licences).	3	4
(d) Milk Dealers (Pasteurisers) ("C" licences).	9	11
(e) Dealers in Pre-Packed Milk ("F" licences).		
(i) Retailers	187	187
(ii) Shops	352	350
(iii) Vending Machines	3	3
	<u>543</u>	<u>540</u>
	<u>604</u>	<u>615</u>

(ii) Routine Sampling

The number of samples of designated milk taken during the year under the Milk (Special Designation) Regulations, 1963/65 totalled 3,960.

Details of these are set out overleaf.

Summary of Routine Milk Samples

Origin of Samples	Designation	Total Samples Taken	Phosphatase Test			Methylene Blue Test			Turbidity Test		Ultra Heat Treated Test	
			Pass	Fail	Void	Pass	Fail	Void	Pass	Fail	Pass	Fail
Dealers including Processors	Pasteurised	2,720	2,715	5	-	2,477	68	175	-	-	-	-
	Sterilised	33	-	-	-	-	-	-	33	Nil	-	-
	Ultra Heat Treated	80	-	-	-	-	-	-	-	-	79	1 Void
	Untreated	667	-	-	-	574	36	57	-	-	-	-
Schools	Pasteurised	286	283	3	-	258	18	10	-	-	-	-
G.C.C. Properties	Pasteurised	121	120	1	-	112	1	8	-	-	-	-
Hospitals	Pasteurised Untreated	52 1	52 -	Nil -	- -	49 1	1 Nil	2 -	- -	- -	- -	- -
TOTALS	-	3,960	3,170	9	-	3,471	124	252	33	Nil	79	1 Void

The number of Untreated Milk samples is down on last year's figures due to further Producer/Retailers discontinuing the retail sale of milk or ceasing milk production altogether.

Of the nine phosphatase failures, only four were from dairies under the control of the County Health Department. Three of these occurred on one day and resulted from malicious interference with heating controls at the dairy. The percentage of Pasteurised Milk samples failing the Methylene Blue test was at 2.45% the lowest of the past ten years and in view of the long hot summer, this figure is particularly good. The high number of milk samples which were declared void because the atmospheric shade temperature exceeded 70°F is an indication of the summer temperature.

5.39% of Untreated milk samples failed the Methylene Blue test and were referred to the County Dairy Husbandry Adviser of the Ministry of Agriculture, Fisheries and Food.

(iii) Milk Containers

Samples of washed bottles and churns were taken regularly from all pasteurising and bottling plants and submitted to the Public Health Laboratory for bacteriological examination. The results are summarized below:-

	<u>Satisfactory</u>	<u>Fairly Satisfactory</u>	<u>Unsatisfactory</u>	<u>Total</u>
Churns	39	5	12	56
Bottles	203	45	52	300

The results are not as satisfactory as last year, 4.4% fewer containers coming within the satisfactory range. The acute shortage of bottles meant that many bottles were returned to dairies after periods of neglect and disuse and an extra amount of bottle cleaning was called for. The conversion to bulk deliveries of milk has reduced the number of churn samples taken.

The number of complaints were received regarding milk during the year and include the following:-

Foreign body in milk	Reported to be a piece of plasticine. No action was taken as it was not certain whether this was in the bottle at the time of filling with milk.
Foil cap in bottle of school milk.	No formal action taken but the dairy subsequently installed a scanning device to detect foreign bodies at the request of the Department.
Two complaints of fruit fly larvae, one with large clusters which were firmly adherent to the bottle sides.	Warning letters sent to dairies. These cases almost certainly arose from the recovery of old bottles.
Glass fragments in a bottle of school milk.	Action pending at the end of the year.

(iv) Brucella abortus

Number of herds from which samples have been taken:-

(i) Producer/Retailers and herds supplying milk to "B" licence holders.	66
(ii) Untreated Cream Producers other than in (i) above.	3
(iii) Producers using own milk in connection with farm holidays, bed and breakfast trade, or casual sales to caravaners and campers other than (i) or (ii) above.	22
(iv) Special investigation of Producer/Wholesalers herds following reports of undulant fever in humans.	2
Total herds sampled	<hr/> 93 <hr/>

Number of herds investigated further. 9

Herds in which one or more infected cows were found. 5.

There was a big reduction in the number of routine and composite herd samples giving reactions to the Milk Ring Test. The figure of 0.67% compared with the next previous lowest in 1971 of 1.07%. This compares very favourably with sample results of some three to four years ago when the number giving rise to a Milk Ring Test reaction was as high as 2.5% and is some indication of the extent to which those producers who continue to retail Untreated milk have improved the health of their herds. One cannot be complacent, however, over the sale and consumption of Untreated milk, particularly from herds which are not "Accredited Brucella Free". This was borne out during the year when a bottle of milk which was purchased on a milk round gave a strong reaction to the Milk Ring Test and further examination by the Public Health Laboratory proved it to have been infected. By the time the result of the guinea pig examination was known, individual cows had been sampled and upon the evidence of these results a Pasteurisation order was served. The producer ceased to retail Untreated milk shortly afterwards.

The number of producers in group(iii)above, whose milk samples have given positive reactions have also declined considerably since the Department first commenced sampling this source. At first a large proportion of samples indicated it was not safe to accept milk from the herd for use in connection with bed and breakfast business or to make casual sales to campers and caravaners. The reactor samples this year came from one producer and it was found that adult cows had been vaccinated. No evidence of infection was reported from the examination and it was concluded that the reactions were as a result of the vaccine.

Following further investigations of ring tests from all sources, five infected cows from five herds were discovered. Two of the farms concerned ceased to retail milk, including the one mentioned above. In two other cases the infected cows were slaughtered, and the remaining herd was still under investigation at the end of the year.

A summary of all samples examined for Brucella abortus is set out overleaf.

	Total Samples	Positive to Milk Ring Test	Doubtful (+/-) reaction to M.R.T.	Number found positive to Brucella abortus by direct culture or guinea pig inoculation.
Routine Stat. Samples	668	4	1	1 ⁰
Composite Herd Samples	215	2		
Producers (group iii above)	185	2	1	-
Special Investigations	2	-	-	-
Follow-up Sample -				
(1) Individual Cows	174	27 *	4	5
(2) Composite	12	3	-	-
	1,256	38	6	6

0 the only positive sample submitted to further examination.

* several repeat examinations required from the same cow in some cases before a conclusive result could be obtained.

(V) CREAM

75 samples of cream were submitted to the Public Health Laboratory for examination, results are summarised below.

	No. of Samples	Methylene Blue Test. Reduction time in			Void or tests not completed by laboratory.
		0 hours (Unsatisfactory)	More than 0 hours less than 4 hours (Doubtful)	More than 4 hours Satisfactory	
Untreated	18	8	6	3	1
Heat Treated					
(1) Ex Producer	15	2	8	5	
(2) Packed by Retailer	9	2	4	3	
(3) Pre-packed	31	10	7	12	2
Ultra Heat Treated	2	-	-	2	
	75	22	25	25	3

The results in respect of Heat-treated cream show an improvement on last year and reflect the trend for smaller dairies to discontinue producing their own cream and to buy in pre-packed cream from larger producers. At 44.4% the number of unsatisfactory samples of Untreated cream is still far too high.

MILK IN SCHOOLS

With the small amount of milk involved at a few of the more remote village schools, some dairymen introduced a restricted delivery. This was generally an alternate day delivery but ensuring that the school always had fresh milk on a Monday. It was usually possible to accommodate the extra days' milk in the school meals kitchen refrigerator and no great difficulties have been experienced. Of the 18 Methylene Blue failures on school samples, 10 were from 6 out-of-County dairies. It was found that in some cases third pints were filled at the dairy at the end of the working day too late to catch the delivery to cold stores within the County and as a result any third pints in the consignment would be from the previous day's bottling and therefore 24 hours older than milk in pint bottles. With so few dairies wishing to deal with the third pint bottles for school milk there was little that could be done about this.

Summary of Samples, Milk Cream and Milk Containers taken during the year.

Statutory Dealers' Samples	3,500
Routine samples from Institutions	174
Milk in Schools Scheme Samples	286
Brucella abortus examinations	1,257
Cream	75
Bottle and Churn examinations	242
	<hr/>
	5,534

Milk is frequently referred to in the earlier annual reports of the County Medical Officer of Health. It was stated to be more systematically adulterated than any other commodity and in 1915, 21.4% of all samples showed added water.

In 1919 there were difficulties reported in some rural districts in obtaining supplies of milk, one reason being that so much milk was being sent out of the County to the large centres of population.

The Milk and Dairies (Amendment) Act, 1922 postponed for several years, the full operation of the Milk and Dairies Act, 1915, but duties relating to milk grading were laid upon the County Council. The County Council undertook a large publicity campaign in 1923, largely at the expense of the National Milk Publicity Council. Despite its recognition by the authorities as the most important food substance, the average consumption at that time was only $\frac{1}{2}$ pint per person per day. Over 800 lectures were given during the year, mainly to schools, and 5 Clean Milk demonstrations were carried out at farms.

The first County Analyst was appointed in 1924 and the Council increased the number of milk samples to a record number of 350. At that time there were 9 producers licenced to sell certified milk.

A revised register of dairies and milk shops in the County in 1926 showed 3,000 premises. The County Medical Officer of Health instructed veterinary inspectors to examine cattle for tuberculosis, each herd to be inspected twice yearly. By 1928 the second survey of dairy cattle was completed and over 53,000 had been examined, of which 4.92% showed tuberculous conditions and 3.85% other scheduled diseases. The work under the Tuberculosis Order, 1925 continued, and in 1938, when the Milk (Special Designation) Orders 1936/38 became the responsibility of the Council Health Department, the veterinary inspectors were transferred to the staff of the Ministry of Agriculture and Fisheries. A County Sanitary Inspector was appointed in that year, together with two Milk Sampling Officers. The Inspector was required to visit all farms and make preliminary inspections for all licence applications. Samples were required at 3 - 4 month intervals combined with samples from County Schools. A third Sampling Officer was appointed early in 1939 and sampling was carried out in areas based on three laboratories at the Cheltenham General Hospital. Gloucester Royal Infirmary and University of Bristol.

The Assistant County Medical Officers carried out routine inspection of farms. At the end of 1938 there were 133 T.T. producers and 598 Accredited Herds. The average monthly samples reported bacteriologically unsatisfactory were 26.13% (increasing in August to 38.2%). The Council decided in November, 1938 that as a condition of licence there should be facilities to sterilise equipment by steam under pressure on all farms with over 15 cows.

By 1947 the establishment had increased to 2 Sanitary Inspectors and 4 Sampling Officers; there were then 452 T.T. producers and 405 accredited herds. The unsatisfactory sample rate was still high at 32% and was attributed to the difficulty of carrying out necessary improvements at farms and the lack of suitable staff.

The supervision of milk producers remained with the County until it passed to the Ministry in October, 1949. At this time the County became responsible for all milk pasteurising plants.

At the end of 1950 there were 16 pasteurising plants in the County and out of 1,550 samples taken, 53 failed the phosphatase test. The first part of Gloucestershire to become a Specified Area, i.e. an area in which only designated milk could be sold, was in the South, adjoining Bristol and Bath in 1952. Further parts followed, Gloucester, Cheltenham, Tewkesbury, Stroud and connecting parishes in 1954; the Forest of Dean in 1956 and Tetbury Rural District in 1957. Throughout these years the number of pasteurising plants increased so that by 1958 there were 25. Nine schools were still supplied with raw milk and in 1959 tubercule was found in a sample of Tuberculin Tested milk supplied to a County Old Persons Home. In 1957 the County Health Department became responsible for the Diseases of Animals (Waste Foods) Order and from some 15 plants at that time, the number of waste food boilers discovered in operation had risen to 75 in 1963.

From 1958 onwards the Public Health Inspector undertook increasing duties in relation to County establishments, such as systematic water sampling at County premises, inspection of School Meals Kitchens and of other County establishments. School Swimming pools, the first of which began about this time, assumed more importance as the numbers of pools increased steadily to 62, and included different types and sizes ranging from an outdoor liner pool of 3,000 gallons to an indoor pool used by both schools and the public, with a capacity of 91,000 gallons.

ANIMAL HEALTH

REPORT ON THE WORK CARRIED OUT BY ANIMAL HEALTH DIVISION, MINISTRY OF AGRICULTURE, FISHERIES AND FOOD, GLOUCESTER, DURING 1973, BY W SIMPSON ESQ MRCVS, DIVISIONAL VETERINARY OFFICER

Livestock Census June 1973

Cattle	...	...	...	...	260,421
Sheep	...	...	...	...	280,452
Pigs	...	...	...	...	122,026
Poultry	...	...	...	...	2,146,896

Notifiable Diseases

Disease	1972		1973	
	Negative Reports Investigated	No. of Confirmed Cases	Negative Reports Investigated	No. of Confirmed Cases
Anthrax	212	1	205	1
Foot and Mouth Disease	2	-	-	-
Fowl Pest (Newcastle Disease)	8	14	4	4
Rabies	7	-	-	-
Swine Fever	-	-	-	-
Tuberculosis	-	-	-	-
Swine Vesicular Disease	-	-	2	8

ANTHRAX

Only one case was confirmed in a carcass which had been moved to the knackery. The animal was seen ailing for an hour before death.

Parts of a carcass examined in Glamorgan were en route to a waste meat processing factory when the disease was confirmed. The infected material with other material contaminated in the lorry was seized and destroyed by burning.

SWINE VESICULAR DISEASE

The above disease broke out in the county on 1 January. Outbreaks were spread throughout the year, the last being confirmed in October. Controlled areas were imposed both on account of local spread and disease elsewhere.

TUBERCULOSIS

No animal was reported or dealt with as an open case of Tuberculosis. There has been an increase in the number of herds with tuberculous reactors and in the number of reactors. It is believed that the persistence of Bovine Tuberculosis in Gloucestershire may be linked with wildlife infection.

BRUCELLA ABORTUS INFECTION IN DAIRY HERDS

There is still a number of herds with active infection. New entrants to the Brucella Incentives Scheme has dropped. At present there are 586 fully accredited with 151 pipeline ^{DAIRY} herds out of a total of 1,551 registered. Of 30 producer/retailers, 27 are accredited and 3 under test.

POULTRY HEALTH SCHEME

The number of flocks in this Scheme is decreasing but this is mostly a reflection of the drop in the total number of breeding flocks. The BWD testing programme was kept up-to-date. There were no reactors.

SALMONELLOSIS

There has been an increase in the number of *S. Typhimurium* isolations, mostly from bovines.

THE SLAUGHTERHOUSE (HYGIENE) REGULATIONS, 1958

THE SLAUGHTER OF ANIMALS (PREVENTION OF CRUELTY) REGULATIONS, 1959

Regular inspections of slaughterhouses and knackers yards were carried out in conjunction with Local Authority officers. The number of slaughterhouses has decreased slightly.

MARKETS (PROTECTION OF ANIMALS) ORDER, 1964

MARKETS (PROTECTION OF ANIMALS) (AMENDMENT) ORDER, 1965

MARKETS (FAIRS AND LAIRS) ORDER, 1925

Markets have been regularly inspected. The store section of the pig markets were closed several times due to Swine Vesicular Disease.

FOWL PEST (NEWCASTLE DISEASE)

The number of outbreaks reported and confirmed were small. In all cases morbidity and mortality were very low.

RABIES AND THE RABIES (IMPORTATION OF MAMMALS) ORDER, 1971

The number of dogs and cats reported under the above Order and quarantined in the two approved kennels in the county was approximately the same as in previous years. All species ^{are} vaccinated with a dead rabies vaccine on arrival.

Disease of Animals (Waste Foods) Orders, 1957 and 1972

The latter Order was enacted towards the end of the year. It will phase out the 1957 Order on 1 July 1974.

SCHOOL HEALTH SERVICE

During the year 13,800 medical examinations were carried out on children of school age and 10,570 special examinations necessitating very full reports.

This compares with 20 years ago when 38,254 medical inspections were carried out. Considering the fact that there are now 40,000 more children in school the difference in numbers of examinations seems somewhat strange. The explanation lies in the fact that children with known defects who are not now necessarily examined by school medical officers which would duplicate surveillance but are regularly discussed with school staff. If it is reported that the child is coping satisfactorily in school the child is noted for discussion at a later date, but if there are any problems in school the child is examined and the G.P. contacted. Whereas 20 years ago the medical officer visited a school once per year and was a little known person to the school, now medical officers are in and out of their schools at least twice per term, and are familiar figures to the school staff and indeed are telephoned by head teachers at other times for advice. Where 20 years ago a medical officer would have enormous lists of relatively minor "defects" and "routine medicals" to see and would possibly see as many as 60 to 70 children in one day, nowadays each examination is a problem case and perhaps only four children seen in one day.

The pattern of problems in 1973 has been of more and more emotional disturbance, with resulting manifestations such as truancy, aggression, pregnancies, disruptive behaviour and school phobias, and it is fascinating to see that these problems are starting earlier and earlier in a child's life; the need for early school entry or admission to nursery school or play groups for emotional reasons increased, and this year 29 children were so referred and paid for by the Education Department.

Assessment of handicap and provision of special education for those pupils who require it is considered very carefully, wherever possible a handicapped child attends a normal local school, with a welfare assistant if necessary, yet in spite of this there are 1,902 children attending special day and residential schools of one kind or another. There is no waiting list for children requiring assessment. Twenty years ago 221 children were attending special schools, and there were 400 children waiting for assessment.

Annual vision testing by school nurses continues to be carried out, and audiometric testing of all 6 and 11 year old children in addition to special referrals to holiday clinics, 18,800 children were audiometrically tested in 1973 compared with 4,101 eight year old children 20 years ago.

The tragic occurrence of pregnancies in school children has spurred on the revision of the Education in Personal Relations programme in schools which will include more sex education. Where pregnancy occurs, home tuition is provided for three months before delivery and three months after delivery and girls have returned to school after this to complete their education. School staff handle such situations with tact and great kindness and support the family unit strongly.

The raised school leaving age has certainly brought its expected problems and one can readily understand the frustration of those children who were expecting to go out into the world to earn a living and who found they had to remain dependent school children. The school medical officers have spent much time in the secondary schools counselling and comforting this age group.

During 1973 we have had a full complement of medical and auxiliary staff and morale has remained high in spite of the uncertainties of reorganisation. Everyone has worked diligently, hard and enthusiastically, and the County of Avon will be fortunate indeed in the Gloucestershire staff who will transfer to them.

SPEECH THERAPY

In 1938 it was reported from Medical Inspections that 26 children needed treatment for defective speech. Naturally, any provisions for such treatment was stopped by the war. In 1944 steps were taken to develop speech therapy in the county by a Joint Committee of the Education Authorities of the County, City of Gloucester and Borough of Cheltenham, approving the appointment of a whole-time Speech Therapist to be shared between the County and City of Gloucester. This post was filled in July 1945, the therapist working in a Clinic in Gloucester. Additional Clinics were set up in other parts of the County and in 1948 the appointment of a second whole-time therapist was approved. In 1949 it was noted in the Annual Report that the two therapists had been unable to deal with the waiting list and "It is evident that the Ministry of Education's suggestion that the need of speech therapists, one for each 10,000 school children, is correct". This was reiterated in 1950 and 1951 when it was suggested that the needs of the County were six-full-time therapists (excluding Cheltenham).

In 1964 approval was given for the setting up of a special class for children with severe speech defects, within an ordinary school, and this was implemented in 1966. It was one of the first of its kind in the country.

Each year staff shortages were reported until 1970 it was decided to request provision in the budget of the next financial year for the establishment to be increased, by the appointment of a Senior Speech Therapist. It was felt that such an appointment, if approved, would be likely to improve recruitment. The first Senior Speech Therapist was appointed in December, 1971.

This has, indeed, been a contributory factor in the ability to increase the number of staff and in the number of children treated, as the following statistics show (including Cheltenham):-

	<u>1971</u>	<u>1972</u>	<u>1973</u>
1. Number of Consultations	1,479	1,522	1,686
2. Number of Cases Admitted for Treatment	380	543	785
3. Number of Cases Discharged.	386	572	634
4. Number of School Pupils who have received Treatment during the Year.	821	900	1,676

Number of Speech Therapists

1971	1 Full-time Senior (From December) 4 Full-time, 6 Part-time (1 from November)
1972	1 Full-time Senior 6 Full-time (2 from October) 11 Part-time
1973	1 Full-time Senior 6 Full-time. 8 Part-time (sharing the same number of sessions as 11 Part-time in 1972).

The part-time therapists are prepared, given sympathetic conditions of employment, gradually to increase the number of sessions worked. Many of the part-time staff work in the term time only.

In 1972 the Senior Speech Therapist prepared a Report on the Speech Therapy Service, discussing the present conditions and suggesting improvements. It has been possible to obtain more equipment, to find more suitable accommodation and by implementing in-service training and in other ways to off set the feeling of isolation felt by many therapists in their working conditions.

In January 1973 an Infant Speech Unit was started, attached to the same school as the Junior Class, in Filton. This has proved an essential part of the service and plans have been presented and approved for other units to be opened in the County when suitable accommodation can be found and when financial restrictions allow.

In March 1973 the first intensive course for children who stammer, was held in Gloucester. Nine children between the ages of ten and fifteen attended a centre every day, all day, to concentrate on improving fluency. This relatively new form of treatment proved very effective and the childrens speech improved, though in varying degrees, but most strikingly all gained in self-confidence and willingness to communicate.

Speech Therapists help to pass on knowledge about normal language development and disorders of speech and language and during 1973, 27 talks were given to students on various courses of training, professional groups and Mothers Clubs etc.

After Re-organisation, in April 1974 Speech Therapy will be entirely within the Area Health Authority care without the present split between Hospital and Local Authority Services. This was agreed following the report on Speech Therapy Services in a Committee of Enquiry instituted by the D.E.S. under the Chairmanship of Professor Quirk. This report has been accepted by the Government Departments but implementation is likely to be slow because of financial restrictions. The Speech Therapists in Gloucestershire welcomed the recommendation of the Report and trust that they can be carried out. Whilst pleased to be part of the new Health Service, links with the Education Department must be maintained for the good of the children requiring treatment.

SWIMMING POOLS AT SCHOOLS AND OTHER COUNTY PREMISES

Three new pools were completed during the year and at the year end construction of a further eight was in progress.

Of the 59 pools at County premises, 55 have filtration plants, 31 are heated and 8 are enclosed. The number of prefabricated, liner pools has increased to 25. Of the four pools still without a filtration plant, proposals are in hand for two to be provided with filters.

Some of the older plants are increasingly needing major overhaul and the decision to appoint a full time swimming pool fitter from April, 1974 is welcomed.

FOOD HYGIENE IN SCHOOLS AND OTHER COUNTY PREMISES

In addition to routine visits of inspection to kitchens at County schools, 91 swabs of washed utensils were taken for bacteriological inspection. All except 10 were satisfactory and investigation of the unsatisfactory samples often brought to light departures from the recommended procedures.

Number of Schools and Children in Attendance
COUNTY (excluding Cheltenham), January, 1974.

	<u>No. of Schools</u>	<u>No. on Registers</u>
1. Nursery	1	38
2. Primary	333	56,166
3. Secondary	45	37,349
4. Special	18	1,273
	-----	-----
	397	94,826
	-----	-----

Cheltenham Excepted District

	<u>No. of Schools</u>	<u>No. on Registers</u>
1. Primary	28	7,725
2. Secondary	10	6,097
3. Special	4	398
	-----	-----
Total	42	14,220
	-----	-----

Gloucestershire Total 439 109,046

STATISTICAL TABLES

Children requiring Education at Special Schools

	Newly Assessed	Placed in Year				
			<u>Requiring Places</u>		<u>Attending</u>	
			<u>Day</u>	<u>Boarding</u>	<u>Day</u>	<u>Boarding</u>
1. Blind	2	2	-	1	2	13
2. Partially Sighted	-	1	-	2	3	19
3. Deaf	-	-	-	-	5	7
4. Partially Hearing	10	11	1	-	49	1
5. Physically Handicapped	30	30	2	1	77	51
6. Delicate	6	2	-	6	10	13
7. Maladjusted	69	44	3	36	93	105
8. E.S.N. (M)	162*	173	122	36	829	169
9. E.S.N. (S)	39	51	12	3	362	65
10. Epileptic	-	1	-	2	1	3
11. Speech Defects	38	17	-	-	21	2
Total	326	332	141	87	1,462	448

*Of the 162 children 68 were assessed by medical officer and 94 were assessed by educational psychologists.

Audiometric Tests 1973

	<u>County</u>	<u>Cheltenham Borough</u>	<u>Total</u>
1. Children in their 6th year			
Number tested	8,092	1,160	9,252
Failed:- One ear	261	) 56	) 507
Both ears	190))
	<hr/>	<hr/>	<hr/>
	451	56	507
	<hr/>	<hr/>	<hr/>
2. Children 1st year Secondary			
1st year tested	5,444	1,093	6,537
Failed:- One ear	79	) 32	) 166
Both ears	55))
	<hr/>	<hr/>	<hr/>
	134	32	166
	<hr/>	<hr/>	<hr/>
3. Primary School; Retests and Specials	1,844	201	2,045
4. Secondary: Retests and Special	134	52	186
5. Clinics at Health Centre, Group Practices, Schools During Holidays	634	154	788

MEDICAL INSPECTION AND TREATMENT

PART I - MEDICAL INSPECTION OF PUPILS ATTENDING MAINTAINED PRIMARY AND SECONDARY SCHOOLS (INCLUDING NURSERY AND SPECIAL SCHOOLS)

TABLE A - PERIODIC MEDICAL INSPECTIONS

Age Groups Inspected (By year of Birth)	No. of Pupils who have received a full medical examination	PHYSICAL CONDITION OF PUPILS INSPECTED		No. of Pupils found not to warrant a medical examination
		Satisfactory	Unsatisfactory	
		No.	No.	
(1)	(2)	(3)	(4)	(5)
1969 and later	3,143)	Figures not		-
1968	6,387)	available		-
1967	2,893)			-
1966	404	32	-	-
1965	394	159	-	628
1964	95	94	1	312
1963	14	14	-	-
1962	17	17	-	-
1961	188	67	-	2,924
1960	166	77	-	2,276
1959 and earlier	126	126	-	534
TOTAL	13,827	586	1	6,674

TABLE B - OTHER INSPECTIONS

Number of special inspections	3,420
Number of Re-inspections	7,154
TOTAL	10,574

PART II - TREATMENT OF PUPILS

TABLE A - EYE DISEASES, DEFECTIVE VISION AND SQUINT

	Number of cases known to have been dealt with.
External and other, excluding errors of refraction and squint	23
Errors of refraction (including squint)	2,598
Total	2,621
Number of pupils for whom spectacles were prescribed	1,010

TABLE B - DISEASES AND DEFECTS OF EAR, NOSE AND THROAT

	Number of cases known to have been dealt with.
Received operative treatment -	
(a) for diseases of the ear	174
(b) for adenoids and chronic tonsillitis	547
(c) for other nose and throat conditions	92
Received other forms of treatment	277
Total	1,090
Total number of pupils still on the register of schools at 31st December, 1973 known to have been provided with hearing aids:-	
(a) during the calendar year 1973	24
(b) in previous years	237

TABLE C - ORTHOPAEDIC AND POSTURAL DEFECTS

	Number known to have been treated
(a) Pupils treated at clinics or out-patients departments	4,600
(b) Pupils treated at school for postural defects	-
TOTAL	4,600

TABLE D - DISEASES OF THE SKIN
(excluding uncleanliness)

	Number of pupils known to have been treated
Ringworm - (a) Scalp	-
(b) Body	-
Scabies	13
Impetigo	5
Other Skin Diseases	9
TOTAL	27

TABLE E - CHILD GUIDANCE TREATMENT

	Number known to have been treated
Pupils treated at Child Guidance Clinics	1,734

TABLE F - SPEECH THERAPY

	Number known to have been treated
Pupils treated by speech therapists	1,962

TABLE G - OTHER TREATMENT GIVEN

	Number known to have been treated
(a) Pupils with minor ailments	1,374
(b) Pupils who received convalescent treatment under School Health Service arrangements	22
(c) Pupils who received B.C.G. vaccination	7,940
(d) Other than (a) (b) and (c) above	2
TOTAL	9,338

SCHOOL CLINICS

<u>CLINIC</u>	<u>ADDRESS</u>	<u>SERVICES</u>
Berkeley	Hospital	E,O
Bishops Cleeve	Tythe Barn	O,S
Bourton-on-the-Water	County Clinic, Station Road, Moore Cottage Hospital	A,D,S E
Bream		S
Cadbury Heath	Earlstone Crescent	D
Cheltenham	County Offices, St. George's Road The Gate House, East Approach Drive.	D,O,S CG
Churchdown	County Dental Clinic, Albemarle Rd.	D
Cinderford	Dockham Road Dilke Hospital	E,O,S,D O
Cirencester	Watermoor Road Memorial Hospital	A,CG,D,S,EN E
Coleford	Community Centre County Clinic, High Nash	S D,E,O.
Downend	Buckingham Gardens	CG,E,S,D,O
Dursley	The Sandpits	A,D,E,O,S,CG
Filton	Shields Avenue, Bristol 7	A,D,E,O,S
Gloucester	Quayside Wing, Shire Hall	A,D,EN,O,S
Kingswood	Health Centre, Alma Road	D,S.E.A.
Lydney	Church Road District Hospital	D,S. E,O
Moreton-in-Marsh	T.A. Site, Stow Road District Hospital	A,D,S E
Newent	County Clinic, West Block, Newent School	A,O
Patchway	Rodway Road	A,CG,D,S
Soundwell	Soundwell Road, Kingswood	M,O
Stroud	The Health Centre, Beeches Green. Hospital	D,CG,M,S,O E,O
Tetbury	Clarrie KitKat Hall County Dental Clinic, The Close	S D
Tewkesbury	Old Grammar School (County Clinic) Hospital	A,O,S,D,CG E,O
Thornbury	Hospital Health Centre, Eastland Road	O A,D,E,O,S
Tutshill	Memorial Hall	S
Winchcombe	County Dental Clinic, Back Lane	D,S,O
Wotton-under-Edge	Sym Lane	A,CG,D,E,O
Yate	Health Centre, West Walk	A,D,E,O,S
Cheltenham Excepted District	County Offices, St. George's Road	D,M,S,O

Index to Services:

A = Audiometry

EN = Enuresis

CG= Child Guidance

M = Minor Ailments

D = Dental

0 = Orthopaedic

E = Eye

S = Speech

CHIROPODY

The report for 1971 explained the conditions which led to the setting up of the Chiropody working part and to their recommendations. The figures which accompany this report reflect the effect of those recommendations. In particular the treatment of the elderly who are unable to travel to a centre has been improved. For the greater part of the year the interval between treatments for all patients was appreciably improved on the previous 3 to 4 months interval but by the end of the year the loss of staff in some area and the rise in the number of patients was causing concern.

One pleasing factor was that two chiropodists who had been sponsored by the County Council at Chiropody Schools became State Registered Chiropodists and took up full-time work with the Council.

NUMBER OF PATIENTS ON REGISTER ON 31ST DECEMBER 1973

	Women (60 & over) Men (65 and over)	Expectant Mothers	Handi- capped Persons	Total	Percentage increase/ decrease
County Area					
1973	10,137	3	144	10,284	+22.48
1972	8,289	2	105	8,396	
Cheltenham					
M.B. 1973	1,243	2	22	1,267	+27.72
1972	974	-	18	992	
Totals					
1973	11,380	5	166	11,551	+23.04
1972	9,263	2	123	9,388	

NUMBER OF TREATMENTS DURING 1973

	At Clinic and Centres	Welfare Homes	In Patients Homes	In Chirop- odists surgeries	Total	Percentage Increase
County Area						
1973	34,243	5,319	5,772	-	44,334	35.15
1972	25,803	4,587	2,412	-	32,802	
Cheltenham						
M.B. 1973	1,357	24	370	2,240	3,991	44.76
1972	1,385	97	226	1,049	2,757	
Totals						
1973	35,600	5,343	5,142	2,240	48,325	35.90
1972	27,188	4,684	2,638	1,049	35,559	

The following table shows the results of the experiments conducted on the 15th and 16th of May 1881. The first column gives the number of the experiment, the second column the time taken for the reaction to take place, the third column the amount of gas evolved, and the fourth column the weight of the substance used.

The results show that the reaction takes place more rapidly when the substance is in a fine state of division, and that the amount of gas evolved is proportional to the weight of the substance used.

The following table shows the results of the experiments conducted on the 17th and 18th of May 1881. The first column gives the number of the experiment, the second column the time taken for the reaction to take place, the third column the amount of gas evolved, and the fourth column the weight of the substance used.

Exp. No.	Time taken for reaction to take place	Amount of gas evolved	Weight of substance used
1	10 min.	1.0	0.5
2	15 min.	1.5	0.5
3	20 min.	2.0	0.5
4	25 min.	2.5	0.5
5	30 min.	3.0	0.5
6	35 min.	3.5	0.5
7	40 min.	4.0	0.5
8	45 min.	4.5	0.5
9	50 min.	5.0	0.5
10	55 min.	5.5	0.5
11	60 min.	6.0	0.5
12	65 min.	6.5	0.5
13	70 min.	7.0	0.5
14	75 min.	7.5	0.5
15	80 min.	8.0	0.5
16	85 min.	8.5	0.5
17	90 min.	9.0	0.5
18	95 min.	9.5	0.5
19	100 min.	10.0	0.5
20	105 min.	10.5	0.5
21	110 min.	11.0	0.5
22	115 min.	11.5	0.5
23	120 min.	12.0	0.5
24	125 min.	12.5	0.5
25	130 min.	13.0	0.5
26	135 min.	13.5	0.5
27	140 min.	14.0	0.5
28	145 min.	14.5	0.5
29	150 min.	15.0	0.5
30	155 min.	15.5	0.5
31	160 min.	16.0	0.5
32	165 min.	16.5	0.5
33	170 min.	17.0	0.5
34	175 min.	17.5	0.5
35	180 min.	18.0	0.5
36	185 min.	18.5	0.5
37	190 min.	19.0	0.5
38	195 min.	19.5	0.5
39	200 min.	20.0	0.5
40	205 min.	20.5	0.5
41	210 min.	21.0	0.5
42	215 min.	21.5	0.5
43	220 min.	22.0	0.5
44	225 min.	22.5	0.5
45	230 min.	23.0	0.5
46	235 min.	23.5	0.5
47	240 min.	24.0	0.5
48	245 min.	24.5	0.5
49	250 min.	25.0	0.5
50	255 min.	25.5	0.5
51	260 min.	26.0	0.5
52	265 min.	26.5	0.5
53	270 min.	27.0	0.5
54	275 min.	27.5	0.5
55	280 min.	28.0	0.5
56	285 min.	28.5	0.5
57	290 min.	29.0	0.5
58	295 min.	29.5	0.5
59	300 min.	30.0	0.5
60	305 min.	30.5	0.5
61	310 min.	31.0	0.5
62	315 min.	31.5	0.5
63	320 min.	32.0	0.5
64	325 min.	32.5	0.5
65	330 min.	33.0	0.5
66	335 min.	33.5	0.5
67	340 min.	34.0	0.5
68	345 min.	34.5	0.5
69	350 min.	35.0	0.5
70	355 min.	35.5	0.5
71	360 min.	36.0	0.5
72	365 min.	36.5	0.5
73	370 min.	37.0	0.5
74	375 min.	37.5	0.5
75	380 min.	38.0	0.5
76	385 min.	38.5	0.5
77	390 min.	39.0	0.5
78	395 min.	39.5	0.5
79	400 min.	40.0	0.5
80	405 min.	40.5	0.5
81	410 min.	41.0	0.5
82	415 min.	41.5	0.5
83	420 min.	42.0	0.5
84	425 min.	42.5	0.5
85	430 min.	43.0	0.5
86	435 min.	43.5	0.5
87	440 min.	44.0	0.5
88	445 min.	44.5	0.5
89	450 min.	45.0	0.5
90	455 min.	45.5	0.5
91	460 min.	46.0	0.5
92	465 min.	46.5	0.5
93	470 min.	47.0	0.5
94	475 min.	47.5	0.5
95	480 min.	48.0	0.5
96	485 min.	48.5	0.5
97	490 min.	49.0	0.5
98	495 min.	49.5	0.5
99	500 min.	50.0	0.5
100	505 min.	50.5	0.5

Exp. No.	Time taken for reaction to take place	Amount of gas evolved	Weight of substance used
101	510 min.	51.0	0.5
102	515 min.	51.5	0.5
103	520 min.	52.0	0.5
104	525 min.	52.5	0.5
105	530 min.	53.0	0.5
106	535 min.	53.5	0.5
107	540 min.	54.0	0.5
108	545 min.	54.5	0.5
109	550 min.	55.0	0.5
110	555 min.	55.5	0.5
111	560 min.	56.0	0.5
112	565 min.	56.5	0.5
113	570 min.	57.0	0.5
114	575 min.	57.5	0.5
115	580 min.	58.0	0.5
116	585 min.	58.5	0.5
117	590 min.	59.0	0.5
118	595 min.	59.5	0.5
119	600 min.	60.0	0.5
120	605 min.	60.5	0.5
121	610 min.	61.0	0.5
122	615 min.	61.5	0.5
123	620 min.	62.0	0.5
124	625 min.	62.5	0.5
125	630 min.	63.0	0.5
126	635 min.	63.5	0.5
127	640 min.	64.0	0.5
128	645 min.	64.5	0.5
129	650 min.	65.0	0.5
130	655 min.	65.5	0.5
131	660 min.	66.0	0.5
132	665 min.	66.5	0.5
133	670 min.	67.0	0.5
134	675 min.	67.5	0.5
135	680 min.	68.0	0.5
136	685 min.	68.5	0.5
137	690 min.	69.0	0.5
138	695 min.	69.5	0.5
139	700 min.	70.0	0.5
140	705 min.	70.5	0.5
141	710 min.	71.0	0.5
142	715 min.	71.5	0.5
143	720 min.	72.0	0.5
144	725 min.	72.5	0.5
145	730 min.	73.0	0.5
146	735 min.	73.5	0.5
147	740 min.	74.0	0.5
148	745 min.	74.5	0.5
149	750 min.	75.0	0.5
150	755 min.	75.5	0.5
151	760 min.	76.0	0.5
152	765 min.	76.5	0.5
153	770 min.	77.0	0.5
154	775 min.	77.5	0.5
155	780 min.	78.0	0.5
156	785 min.	78.5	0.5
157	790 min.	79.0	0.5
158	795 min.	79.5	0.5
159	800 min.	80.0	0.5
160	805 min.	80.5	0.5
161	810 min.	81.0	0.5
162	815 min.	81.5	0.5
163	820 min.	82.0	0.5
164	825 min.	82.5	0.5
165	830 min.	83.0	0.5
166	835 min.	83.5	0.5
167	840 min.	84.0	0.5
168	845 min.	84.5	0.5
169	850 min.	85.0	0.5
170	855 min.	85.5	0.5
171	860 min.	86.0	0.5
172	865 min.	86.5	0.5
173	870 min.	87.0	0.5
174	875 min.	87.5	0.5
175	880 min.	88.0	0.5
176	885 min.	88.5	0.5
177	890 min.	89.0	0.5
178	895 min.	89.5	0.5
179	900 min.	90.0	0.5
180	905 min.	90.5	0.5
181	910 min.	91.0	0.5
182	915 min.	91.5	0.5
183	920 min.	92.0	0.5
184	925 min.	92.5	0.5
185	930 min.	93.0	0.5
186	935 min.	93.5	0.5
187	940 min.	94.0	0.5
188	945 min.	94.5	0.5
189	950 min.	95.0	0.5
190	955 min.	95.5	0.5
191	960 min.	96.0	0.5
192	965 min.	96.5	0.5
193	970 min.	97.0	0.5
194	975 min.	97.5	0.5
195	980 min.	98.0	0.5
196	985 min.	98.5	0.5
197	990 min.	99.0	0.5
198	995 min.	99.5	0.5
199	1000 min.	100.0	0.5
200	1005 min.	100.5	0.5

